CD CHANGER

C929WF

SERVICE MANUAL

KENWOOD

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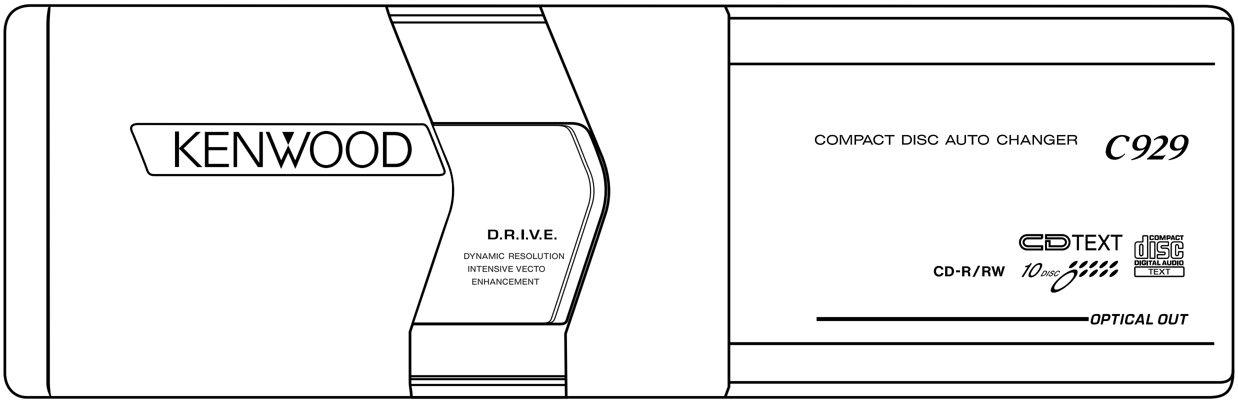
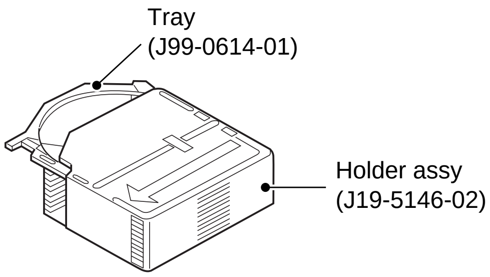
B53-0093-00 (C) 0

SUBARU GENUINE

MODEL	PARTS No.
C929WF	H621EAG000


KENWOOD
D.R.I.V.E.
DYNAMIC RESOLUTION
INTENSIVE VECTO
ENHANCEMENT
COMPACT DISC AUTO CHANGER
C929
CD TEXT
CD-R/RW
10 DISC
COMPACT disc DIGITAL AUDIO TEXT
OPTICAL OUT

Please refer to the service manual (B51-7796-00) of C929 except the following information.

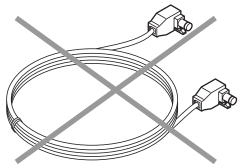

Tray
(J99-0614-01)
Holder assy
(J19-5146-02)

PARTS LIST

*New Parts

Ref. No.	New	Parts No.	Description
-	*	H54-3116-04	ITEM CARTON CASE

C929WF does not include the following parts.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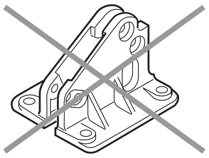
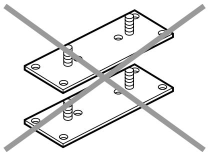
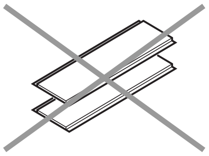
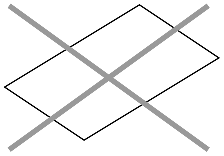
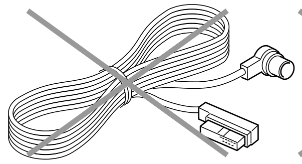

Bracket


Mounting hardware assy


Adhesive tape


Instruction manual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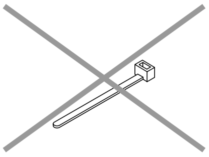
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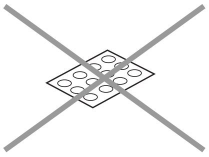
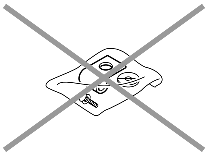

Blind plate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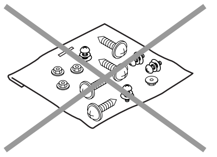
Screw set

CD CHANGER

C929

SERVICE MANUAL

KENWOOD

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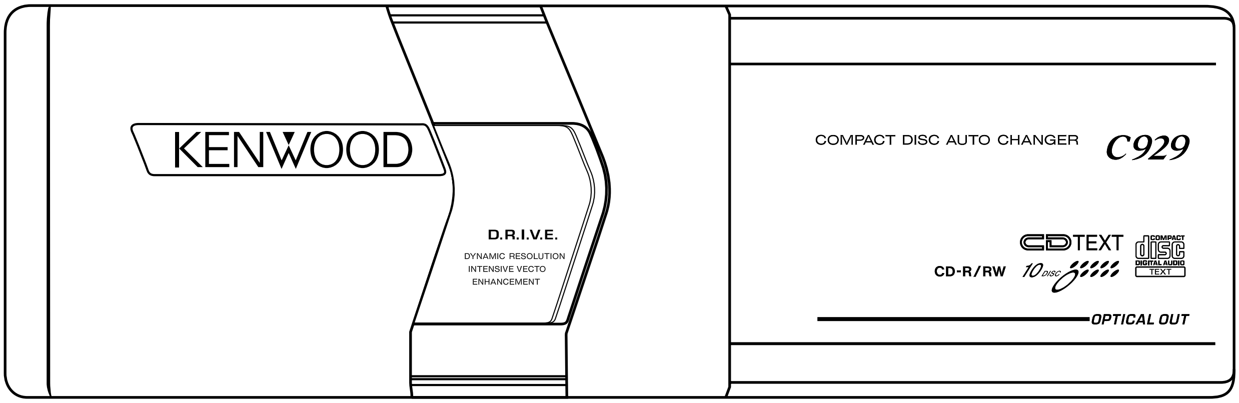
B51-7796-00 (K) 3095

Refer to the service manual "KDC-C710" (B51-7104-00) for MECHANISM OPERATION DESCRIPTION.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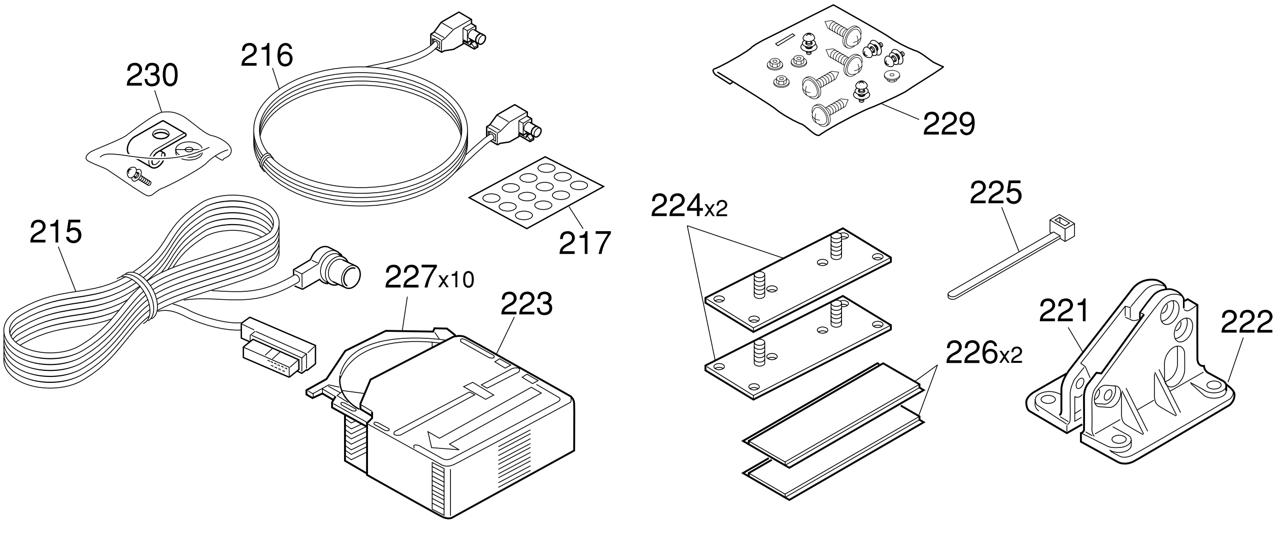
DYNAMIC RESOLUTION
INTENSIVE VECTO
ENHANCEMENT
COMPACT DISC AUTO CHANGER
C929
TEXT
COMPACT disc DIGITAL AUDIO TEXT
CD-R/RW
10 DISC
OPTICAL OUT

The following reference numbers with accessory parts are the same reference numbers used on EXPLODED VIEW and PARTS LIST.


230
216
229
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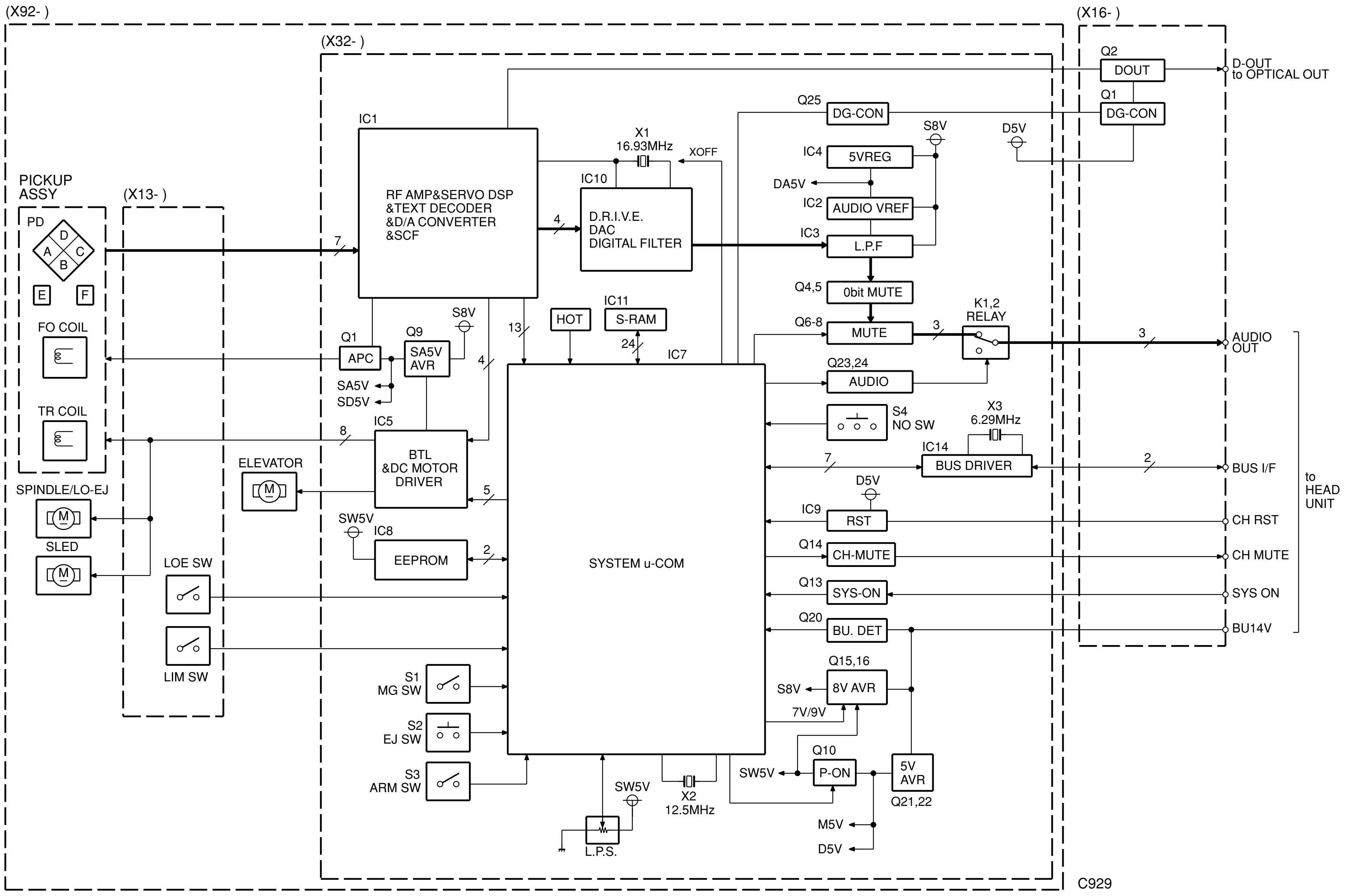
217
224x2
225
227x10
223
221
222
226x2

C929

BLOCK DIAGRAM


(X92-)
(X32-)
(X16-)
(X13-)
PICKUP ASSY
PD
A
B
C
D
E
F
FO COIL
TR COIL
SPINDLE/LO-EJ
SLED
M
ELEVATOR
LOE SW
LIM SW
IC1
RF AMP&SERVO DSP &TEXT DECODER &D/A CONVERTER &SCF
7
4
13
X1
16.93MHz
XOFF
IC10
D.R.I.V.E. DAC DIGITAL FILTER
Q1
APC
Q9
SA5V AVR
S8V
SA5V
SD5V
IC5
BTL &DC MOTOR DRIVER
8
5
SW5V
IC8
EEPROM
2
HOT
IC11
S-RAM
24
IC7
SYSTEM u-COM
S1
MG SW
S2
EJ SW
S3
ARM SW
L.P.S.
X2
12.5MHz
Q25
DG-CON
IC4
5VREG
DA5V
IC2
AUDIO VREF
IC3
L.P.F
Q4,5
0bit MUTE
Q6-8
MUTE
3
K1,2
RELAY
Q23,24
AUDIO
S4
NO SW
X3
6.29MHz
IC14
BUS DRIVER
D5V
IC9
RST
Q14
CH-MUTE
Q13
SYS-ON
Q20
BU. DET
Q15,16
8V AVR
S8V
7V/9V
Q10
P-ON
SW5V
5V AVR
Q21,22
M5V
D5V
Q2
DOUT
Q1
DG-CON
D-OUT to OPTICAL OUT
AUDIO OUT
BUS I/F
CH RST
CH MUTE
SYS ON
BU14V
to HEAD UNIT
C929

COMPONENT DESCRIPTION

CD PLAYER UNIT (X32-4970-00)

REF. No.	FUNCTION	OPERATION
IC1	RF ERROR AMPLIFIER / SERVO DIGITAL SIGNAL PROCESSOR	RE amplifier, Focus/Tracking error amplifier, APC circuit, Reference amplifier, Defect RFOK mirror circuit, EFM comparator, Vibration detector, Digital servo data processor, Digital loop filter, 8 times over sampling filter, D/A converter.
IC2	VOLTAGE FOLLOWER	Audio reference voltage supply.
IC3	ACTIVE FILTER	2nd low pass filter.
IC4	AVR	Audio 5V power supply.
IC5	MOTOR DRIVER	Focus tracking actuator, Sled/Spindle MD deck up/down motor driver.
IC7	SYSTEM µ-COM	Servo control / Mechanism control / Multiple purposes interface.
IC8	MEMORY	Mechanism up/down position offset servo initial data memory.
IC9	µ-COM RESET.	Resets u-com.
IC10	DRIVER	DAC.
IC11	TEXT DATA MEMORY	Memorises data from text decoder through u-com.
IC14	IE-BUS DRIVER	Bus driver.
Q1	LASER CONTROLLER	"ON" when IC13's APC goes on.
Q4	Q1 DRIVER	0 bit mute goes on when "H" level signal is putout from LZ port of IC6.
Q5	Q2 DRIVER	0 bit mute goes on when "H" level signal is putout from RZ port of IC6.
Q6,7	AUDIO MUTE	Mute goes on when "L" level signal output from A. MUTE port of IC7.
Q8	Q1&2 DRIVER	Mute goes on when "L" level signal is output from A. MUTE Port of IC7.
Q9	CD SYSTEM 5V POWER SUPPLY	Transistor with regulator inside the IC12.
Q10	P.ON SW	SW5V turns on when "L" level signal is output from P.ON port of IC7.
Q11	RESET SW	Resets u-com by "H" level reset control signal from the head unit.
Q12	CLOCK ON/OFF	Clock goes off when "H" level signal is output from XOFF port of IC7.
Q13	SYSTEM-ON SW	Works during the ACC and power on.
Q14	CH-MUTE SW	Audio mute output level goes on when "H" level signal is output from AUDIO port of IC7.
Q15	SW +8 AVR	
Q16	Q15 DRIVER	Drives Q15.
Q17	AVR 8V SW	Switches AVR 8V power supply.
Q18	Q11 DRIVER	Drives Q11.
Q19	AVR 7V/8V SW	"H" (7V) : Usual play mode. "L" (8V) : Elevator up/down.
Q20	B.U. VOLTAGE DOWN DETECTION SW	
Q21	B.U. +5V AVR	
Q22	Q21 DRIVER	Drives Q21.
Q23	Q24 DRIVER	Audio turns on when "H" level signal is output from AUDIO port of IC7.
Q24	RELAY SW	
Q25	Q1 (on X16-) DRIVER	Digital-out turns on when "H" level signal is output from DGCON port of IC7.
Q31	MOTOR DRIVER REFERENCE VOLTAGE SW	
Q32	SUB BEAM F SIGNAL TIME CONSTANT SW	"H" when time constant takes effect.

SUB-CIRCUIT UNIT (X16-1030-00)

REF. No.	FUNCTION	OPERATION
Q1	D-OUT (TRANSISTOR VCC SW)	
Q2	D-OUT (TRANSMITTER DRIVER)	

MICROCOMPUTER'S TERMINAL DESCRIPTION

(X32-) IC7 : µ-COM

PORT No.	PORT NAME	I/O	FUNCTION	OPERATING CONDITION
1	-	-	-	
2	$\overline{\text{TSTB}}$	O	Text data strove.	
3	T-BANK	I	Tracking filter bank SW signal.	"H" : Bank 1 (Gain-up mode).
4	F-OK	I	Focus-on signal.	"H" : Focus on.
5	$\overline{\text{XTALEN}}$	O	DAC servo IC oscillation stop control.	"H" : Oscillation stop.
6	$\overline{\text{RESET}}$	O	Servo IC reset.	"L" : Reset.
7	SAO	O	Servo IC communication address setting.	
8	SSTB	O	Servo IC communication strove.	
9	VDD	-	VDD	
10	X2	-	Main clock 2.	
11	X1	I	Main clock 1.	
12	VSS	-	GND.	
13	-	-	-	
14	XT1	-	Sub clock 1.	
15	RESET	I	Reset.	
16	FO-GUP	I	Focus gain-up SW.	"H" : Focus gain up.
17	MG-SW	I	Magazine SW.	"H": Magazine inserted.
18	EJ-SW	I	Eject SW.	"H" : Switch on.
19	B-REQ-H	I	Communication request signal.	
20	PACK	I	Text data - Pack synchronization signal.	
21	SYS-ON	I	Changer control from head unit.	"L" : System on.
22	BU-DET	I	Back-up momentary power-down detection.	"H" : Momentary power down.
23	AVDD	-	VDD.	
24	A VREF 0	I	Inner A/D converter reference voltage.	
25	HOT	I	Temperature-up detection.	Detects over 4V, releases the detection when the voltage goes to be under 4V.
26	LPS	I	Mechanism deck height detection.	
27	LO-E-SW	I	Loading end SW.	"L" : Loading ends.
28	LIM-SW	I	Limit switch.	"L" : Laser pick-up being most inside detection.
29	T-OFF	I	Tracking-off mode.	"H" : Tracking off.
30	ADJ-SEL	I	Servo automatic adjustment on/off.	"H" : Automatic adjustment off.
31	TEST1	I	For mechanism endurance test.	
32	TEST2	I	For mechanism endurance test.	
33	AVSS	-	GND.	
34	AUDIO	O	Audio relay control out.	"H" : Changer source.
35	A-MUTE	O	Audio mute.	"L" : Mute on.
36	A VREF 1	-	Inner A/D converter reference voltage.	
37	S-DI	I	Servo IC communication serial data.	
38	S-DO	O	Servo IC communication serial data.	
39	S-CK	O	Servo IC communication serial clock.	
40	B-DIC	I	Bus serial.	
41	B-DCOM	O	Bus serial.	
42	B-CLK	O	Bus serial clock.	
43	B-C/D	O	Bus command data SW.	
44	CH-MUTE	O	Audio mute to head unit.	"L" : Mute on.
45	TSI	I	Text data.	
46	TSO	O	Text data.	
47	$\overline{\text{TSCK}}$	O	Text clock.	
48	A0	O	Address setting to S-RAM.	
49	A1	O	Address setting to S-RAM.	
50	A2	O	Address setting to S-RAM.	
51	A3	O	Address setting to S-RAM.	
52	A4	O	Address setting to S-RAM.	

MICROCOMPUTER'S TERMINAL DESCRIPTION

(X32-) IC7 : µ-COM

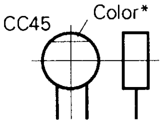
PORT No.	PORT NAME	I/O	FUNCTION	OPERATING CONDITION
53	A5	O	Address setting to S-RAM.	
54	A6	O	Address setting to S-RAM.	
55	A7	O	Address setting to S-RAM.	
56	D0	I/O	Data from and to S-RAM.	
57	D1	I/O	Data from and to S-RAM.	
58	D2	I/O	Data from and to S-RAM.	
59	D3	I/O	Data from and to S-RAM.	
60	D4	I/O	Data from and to S-RAM.	
61	D5	I/O	Data from and to S-RAM.	
62	D6	I/O	Data from and to S-RAM.	
63	D7	I/O	Data from and to S-RAM.	
64	A8	O	Address setting to S-RAM.	
65	A9	O	Address setting to S-RAM.	
66	A10	O	Address setting to S-RAM.	
67	A11	O	Address setting to S-RAM.	
68	A12	O	Address setting to S-RAM.	
69	A13	O	Address setting to S-RAM.	
70	A14	O	Address setting to S-RAM.	
71	A15	O	Address setting to S-RAM.	
72	VSS	-	GND.	
73	A16	O	Enable control to S-RAM.	
74	A17	O	Enable control to S-RAM.	
75	DG-CON	O	Digital-out control.	"H" : Digital out.
76	$\overline{\text{ELV-ADJ}}$	I	Mechanism deck height adjustment mode.	"L" : Adjustment mode.
77	RD	O	Reading control to S-RAM.	
78	WR	O	Reading control to S-RAM.	
79	WAIT	I	WAIT insertion from S-RAM during accessing.	
80	-	-	-	
81	VDD	-	VDD.	
82	PU-SEL	I	Laser pick-up type discrimination.	"H" : Made by KENWOOD. "L" : Made by others.
83	PU-OK	I	Laser pick-up type discrimination.	"H" : The laser pick-up is OK.
84	SP/LO +	O	Spindle/Loading control.	
85	SP/LO -	O	Spindle/Loading control.	
86	ELV+	O	Mechanism up/down control.	
87	ELV-	O	Mechanism up/down control.	
88	SRV-SEL	I	Servo operating mode.	"H" : Servo mode.
89	$\overline{\text{SEARCH}}$	O	Search play SW.	"L" : Searching.
90	$\overline{\text{SLNSA}}$	O	Sled non-felt area on/off.	"L" : Sled non-felt area on.
91	EEP-WR	O	EEP-ROM writing mode.	"H" : EEP-ROM writing mode.
92	7V/8V	O	Mechanism driving IC power supply control.	
93	NO-SW	I	Bus number SW.	"H" : CH1. "L" : CH2.
94	TEST/VPP	-	Flash ROM program mode.	
95	B-CS	O	Bus chip selector.	
96	B-RST	O	Bus reset.	
97	SDA	I/O	EEP-ROM data.	
98	SCL	O	EEP-ROM clock.	
99	P-ON	O	P-ON.	"L" : AVR power on.
100	ARM-SW	I	Arm SW.	"H" : Arm SW on.

PARTS DESCRIPTIONS

CAPACITORS

CC 45 TH 1H 220 J
1 2 3 4 5 6

1 = Type ... ceramic, electrolytic, etc.
2 = Shape ... round, square, ect.
3 = Temp. coefficient
4 = Voltage rating
5 = Value
6 = Tolerance



• Capacitor value

010 = 1pF
100 = 10pF
101 = 100pF
102 = 1000pF = 0.001μF
103 = 0.01μF

2 2 0 = 22pF
Multiplier
2nd number
1st number

• Temperature coefficient

1st Word	C	L	P	R	S	T	U
Color*	Black	Red	Orange	Yellow	Green	Blue	Violet
ppm/°C	0	−80	−150	−220	−330	−470	−750

2nd Word	G	H	J	K	L
ppm/°C	±30	±60	±120	±250	±500

Example : CC45TH = −470 ± 60ppm/°C

• Tolerance (More than 10pF)

Code	C	D	G	J	K	M	X	Z	P	No code
(%)	±0.25	±0.5	±2	±5	±10	±20	+40 −20	+80 -20	+100 −0	More than 10μF −10 ~ +50 Less than 4.7μF −10 ~ +75

(Less than 10pF)

Code	B	C	D	F	G
(pF)	±0.1	±0.25	±0.5	±1	±2

• Voltage rating

2nd word / 1st word	A	B	C	D	E	F	G	H	J	K	V
0	1.0	1.25	1.6	2.0	2.5	3.15	4.0	5.0	6.3	8.0	–
1	10	12.5	16	20	25	31.5	40	50	63	80	35
2	100	125	160	200	250	315	400	500	630	800	–
3	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	–

• Chip capacitors

(EX) C C 7 3 F S L 1 H 0 0 0 J
1 2 3 4 5 6 7
(Chip) (CH, RH, UJ, SL)

(EX) C K 7 3 F F 1 H 0 0 0 Z
1 2 3 4 5 6 7
(Chip) (B, F)

Refer to the table above.

1 = Type
2 = Shape
3 = Dimension
4 = Temp. coefficient
5 = Voltage rating
6 = Value
7 = Tolerance

Dimension (Chip capacitors)

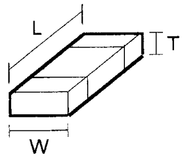
Dimension code	L	W	T
Empty	5.6 ± 0.5	5.0 ± 0.5	Less than 2.0
A	4.5 ± 0.5	3.2 ± 0.4	Less than 2.0
B	4.5 ± 0.5	2.0 ± 0.3	Less than 2.0
C	4.5 ± 0.5	1.25 ± 0.2	Less than 1.25
D	3.2 ± 0.4	2.5 ± 0.3	Less than 1.5
E	3.2 ± 0.2	1.6 ± 0.2	Less than 1.25
F	2.0 ± 0.3	1.25 ± 0.2	Less than 1.25
G	1.6 ± 0.2	0.8 ± 0.2	Less than 1.0

RESISTORS

• Chip resistor (Carbon)

(EX) R K 7 3 E B 2 B 0 0 0 J
1 2 3 4 5 6 7
(Chip) (B,F)

Dimension



• Carbon resistor (Normal type)

(EX) R D 1 4 B B 2 C 0 0 0 J
1 2 3 4 5 6 7

1 = Type
2 = Shape
3 = Dimension
4 = Temp. coefficient
5 = Rating wattage
6 = Value
7 = Tolerance

Dimension (Chip resistor)

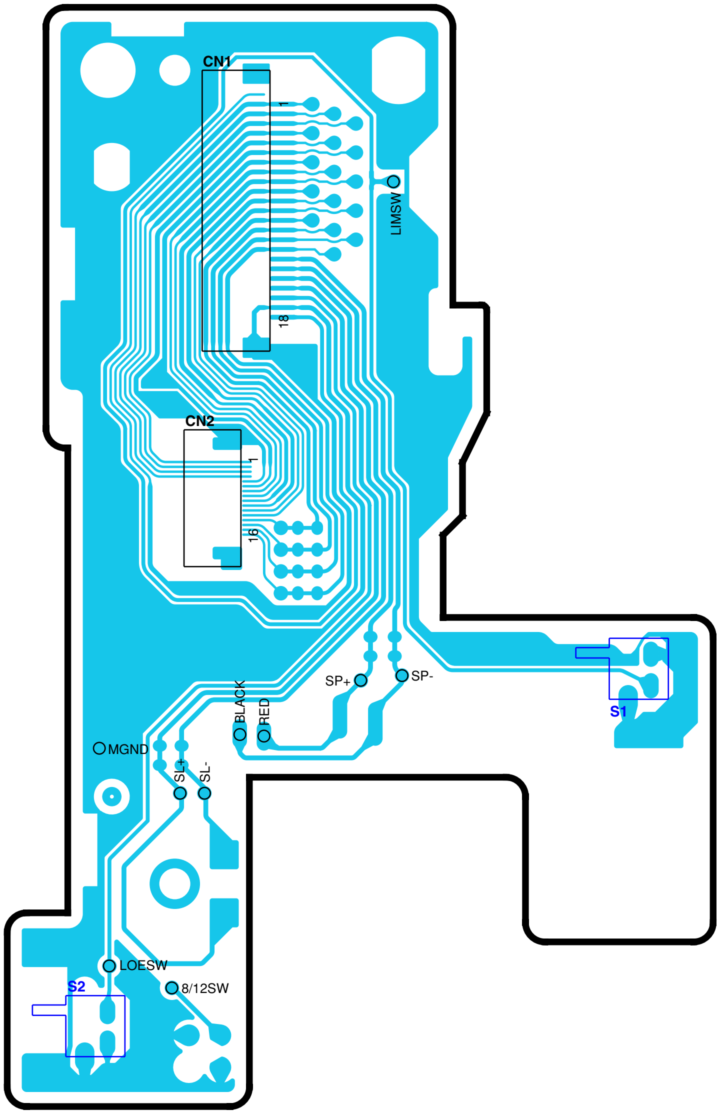
Dimension code	L	W	T
E	3.2 ± 0.2	1.6 ± 0.2	1.0
F	2.0 ± 0.3	1.25 ± 0.2	1.0
G	1.6±0.2	0.8±0.2	0.5±0.1

Rating wattage

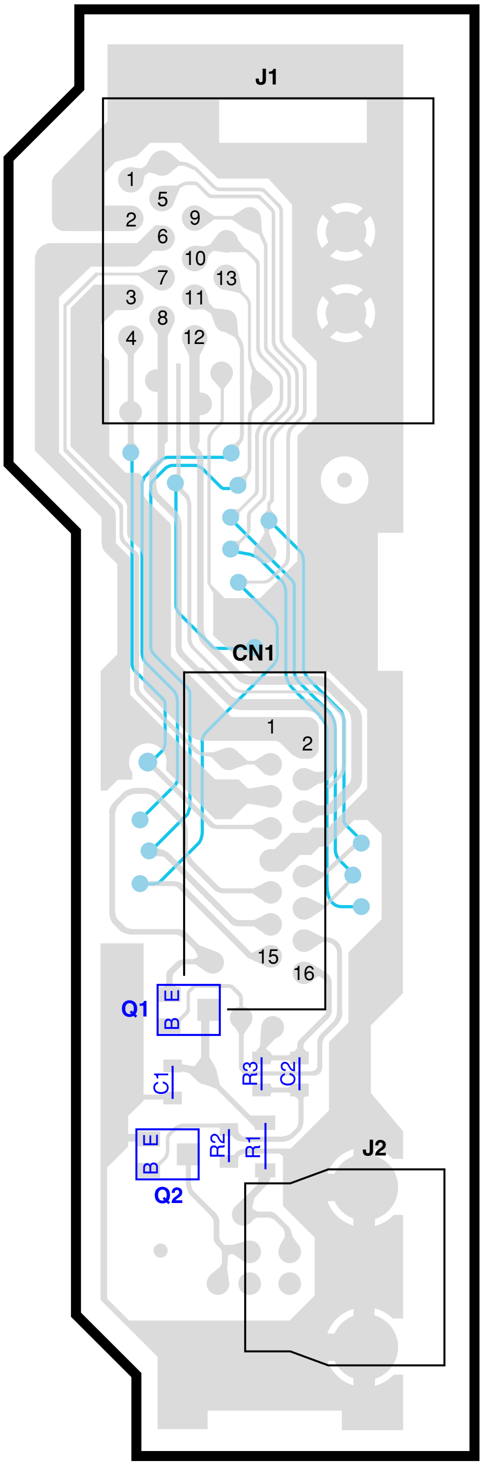
Code	Wattage	Code	Wattage	Code	Wattage
1J	1/16W	2C	1/6W	3A	1W
2A	1/10W	2E	1/4W	3D	2W
2B	1/8W	2H	1/2W		

PC BOARD (Component side view)

SUB-CIRCUIT UNIT
X13-9850-00 (J74-0987-01)


CN1
1
18
LIMSW
CN2
1
16
SP+
SP-
S1
BLACK
RED
MGND
SL+
SL-
LOESW
8/12SW
S2

SUB-CIRCUIT UNIT
X16-1030-00 (J74-0630-12)


J1
1
5
9
2
6
10
7
13
3
11
8
4
12
CN1
1
2
15
16
Q1
B
E
C1
R3
C2
R2
R1
B
E
Q2
J2

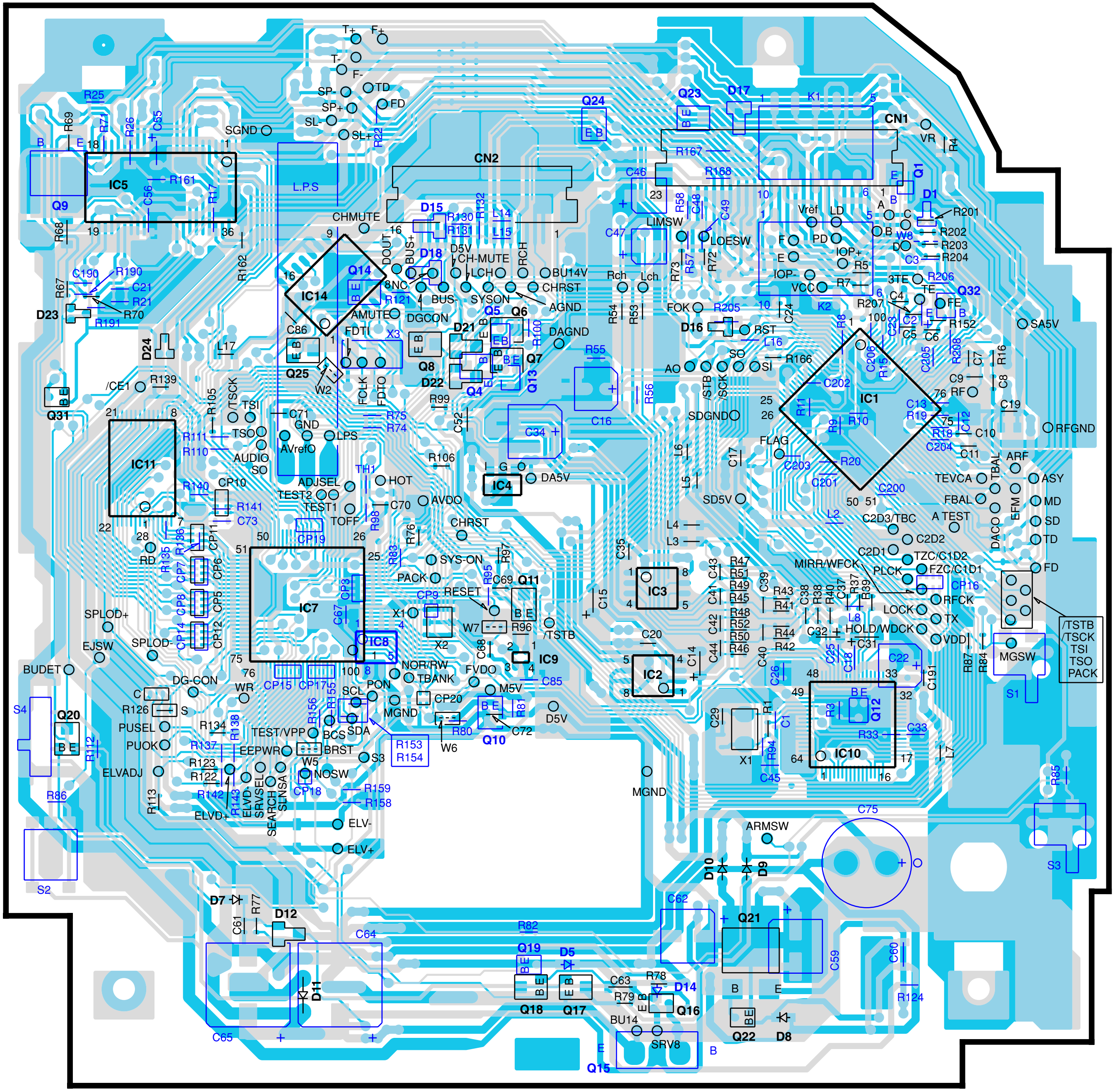
(X16-)

Ref.No.	Address
Q1	5D
Q2	5D

Refer to the schematic diagram for the value of resistors and capacitors.

PC BOARD (Component side view)

CD PLAYER UNIT X32-4970-00 (J74-1133-11)


IC1
IC2
IC3
IC4
IC5
IC7
IC8
IC9
IC10
IC11
IC14
Q1
Q4
Q5
Q6
Q7
Q8
Q9
Q10
Q11
Q12
Q13
Q14
Q15
Q16
Q17
Q18
Q19
Q20
Q21
Q22
Q23
Q24
Q25
Q31
Q32
CN1
CN2
L.P.S
K1
D1
D5
D7
D8
D9
D10
D11
D12
D14
D15
D16
D17
D18
D21
D22
D23
D24
X1
X2
X3
S1
S2
S3
S4
C75
C59
C60
C61
C62
C64
C65
T+
F+
T-
F-
SP-
SP+
SL-
SL+
TD
FD
SGND
CHMUTE
DOUT
BUS+
D5V
CH-MUTE
LCH
RCH
BU14V
CHRST
AGND
DAGND
SYSON
BUS-
NC
AMUTE
DGCON
FDTI
FCLK
FDTO
/TSCK
TSI
TSO
AUDIO
SO
GND
LPS
AVrefO
ADJSEL
TEST2
TEST1
TOFF
HOT
AVDO
C70
CHRST
SYS-ON
PACK
RESET
/TSTB
NOR/RW
TBANK
FVDO
M5V
CP20
MGND
D5V
SCL
PON
SDA
BCS
BRST
TEST/VPP
EEPWR
NOSW
ELVD-
SRVSEL
SLNSA
SEARCH
ELVD+
ELV-
ELV+
SPLOD+
SPLOD-
EJSW
BUDET
DG-CON
WR
PUSEL
PUOK
ELVADJ
RD
/CE1
DA5V
Rch
Lch
LIMSW
LOESW
Vref
LD
PD
IOP+
IOP-
VCC
FOK
RST
SO
SI
AO
/STB
SCK
SDGND
FLAG
SD5V
L4
L3
MIRR/WFCK
PLCK
LOCK
HOLD/WDCK
TX
VDD
RFCK
FZC/C1D1
TZC/C1D2
C2D1
C2D2
C2D3/TBC
A TEST
FBAL
TEVCA
ARF
ASY
MD
SD
TD
FD
RFGND
SA5V
3TE
TE
FE
RF
VR
MGSW
/TSTB
/TSCK
TSI
TSO
PACK
ARMSW
MGND
BU14
SRV8
TBAL
EFM
DACO
R201
R202
R203
R204
R205
R206
R207
R208

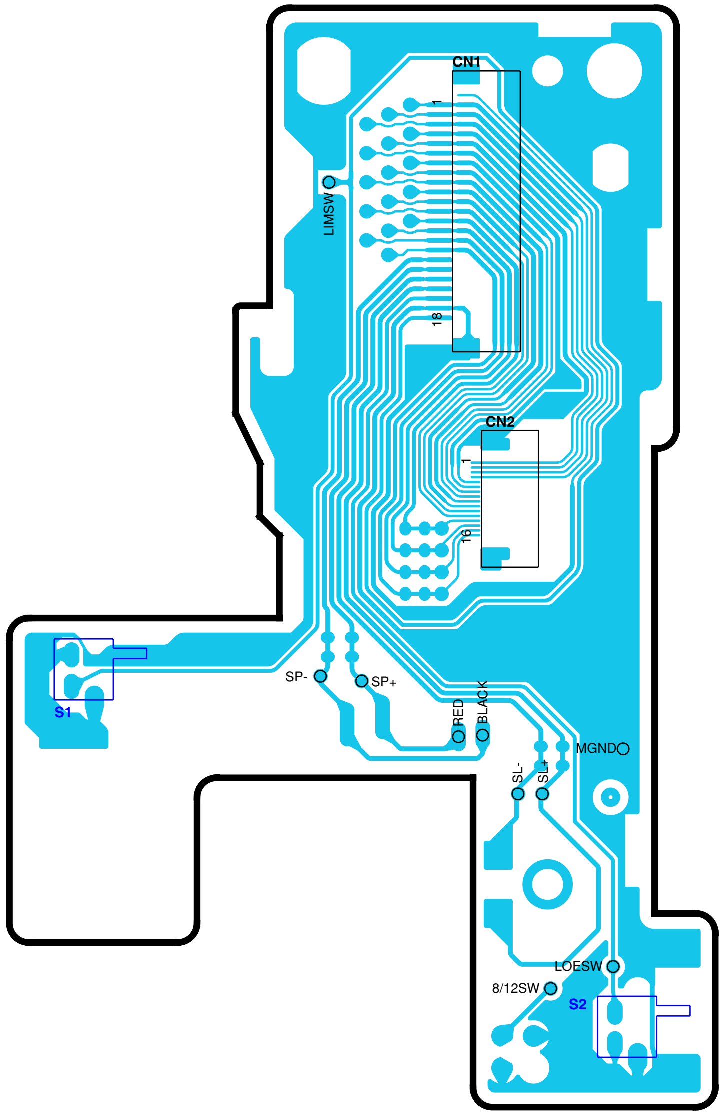
(X32-)

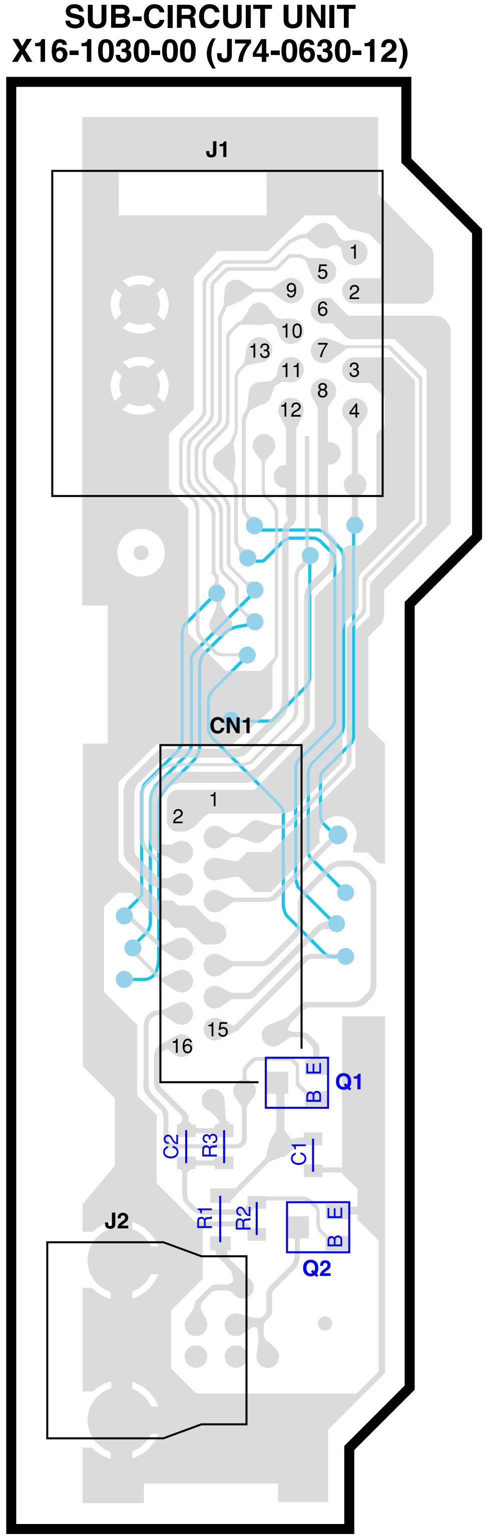
Ref.No.	IC1	IC2	IC3	IC4	IC5	IC7	IC8	IC9	IC10	IC11	IC14	Q1	Q4	Q5	Q6	Q7	Q8	Q9
Address	3I	4H	4H	3H	2F	4G	4G	4H	4I	3F	3G	2I	3H	3H	3H	3H	3G	2F

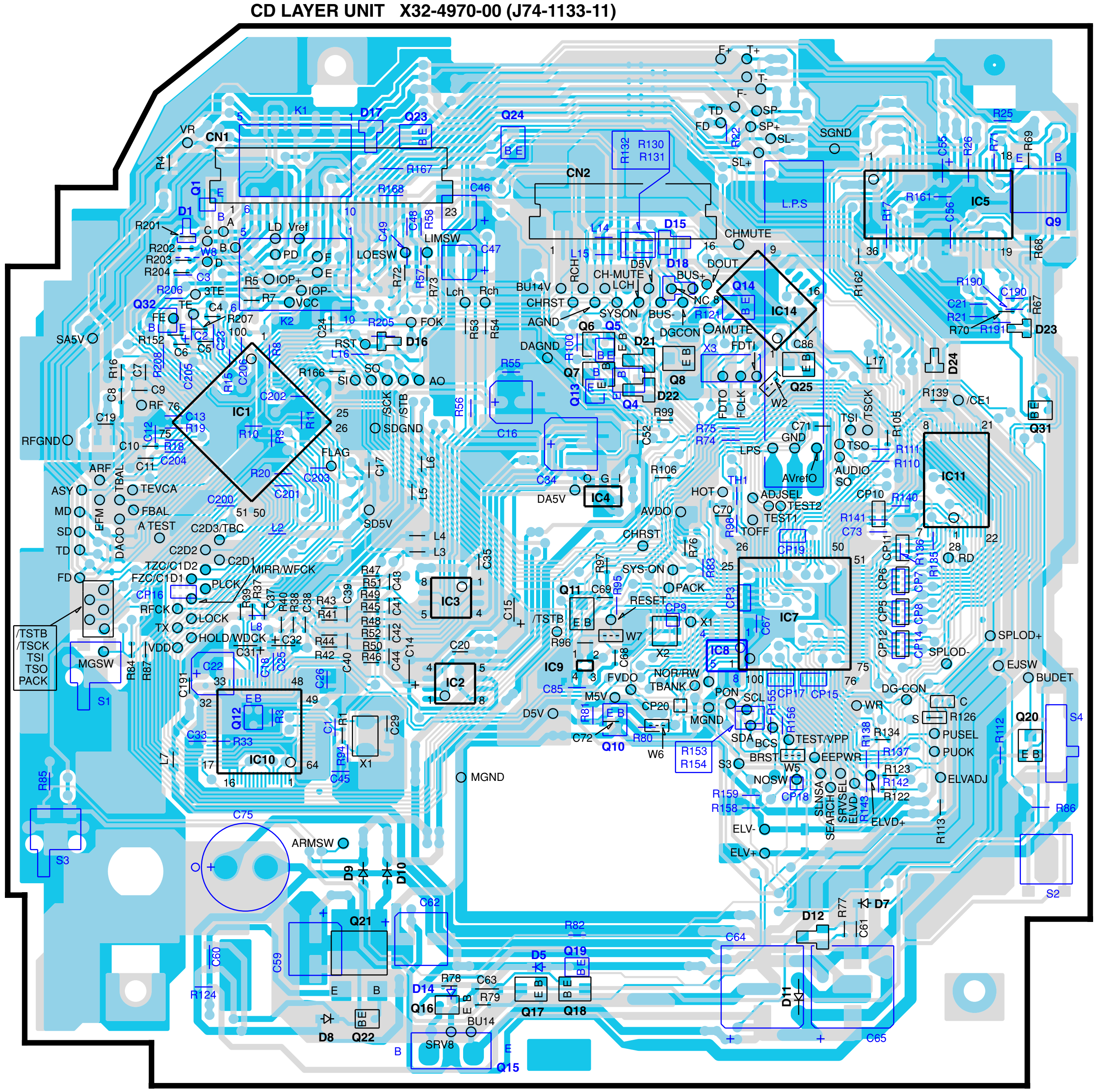
Ref.No.	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q31	Q32
Address	4H	4H	4I	3H	3G	6H	5H	5H	5H	5H	4F	5I	5I	2H	2H	3G	3F	3I

Refer to the schematic diagram for the value of resistors and capacitors.

PC BOARD (Foil side view)


SUB-CIRCUIT UNIT
X13-9850-00 (J74-0987-01)
CN1
CN2
LIMSW
S1
SP-
SP+
RED
BLACK
MGND
SL-
SL+
LOESW
8/12SW
S2


SUB-CIRCUIT UNIT
X16-1030-00 (J74-0630-12)
J1
CN1
J2
Q1
Q2
C1
C2
R1
R2
R3


CD LAYER UNIT X32-4970-00 (J74-1133-11)
CN1
CN2
IC1
IC2
IC3
IC4
IC5
IC7
IC8
IC9
IC10
IC11
IC14
Q1
Q4
Q5
Q6
Q7
Q8
Q9
Q10
Q11
Q12
Q13
Q14
Q15
Q16
Q17
Q18
Q19
Q20
Q21
Q22
Q23
Q24
Q25
Q31
Q32
S1
S2
S3
S4
MGND
SGND
RFGND
ARMSW
MGSW

(X32-)

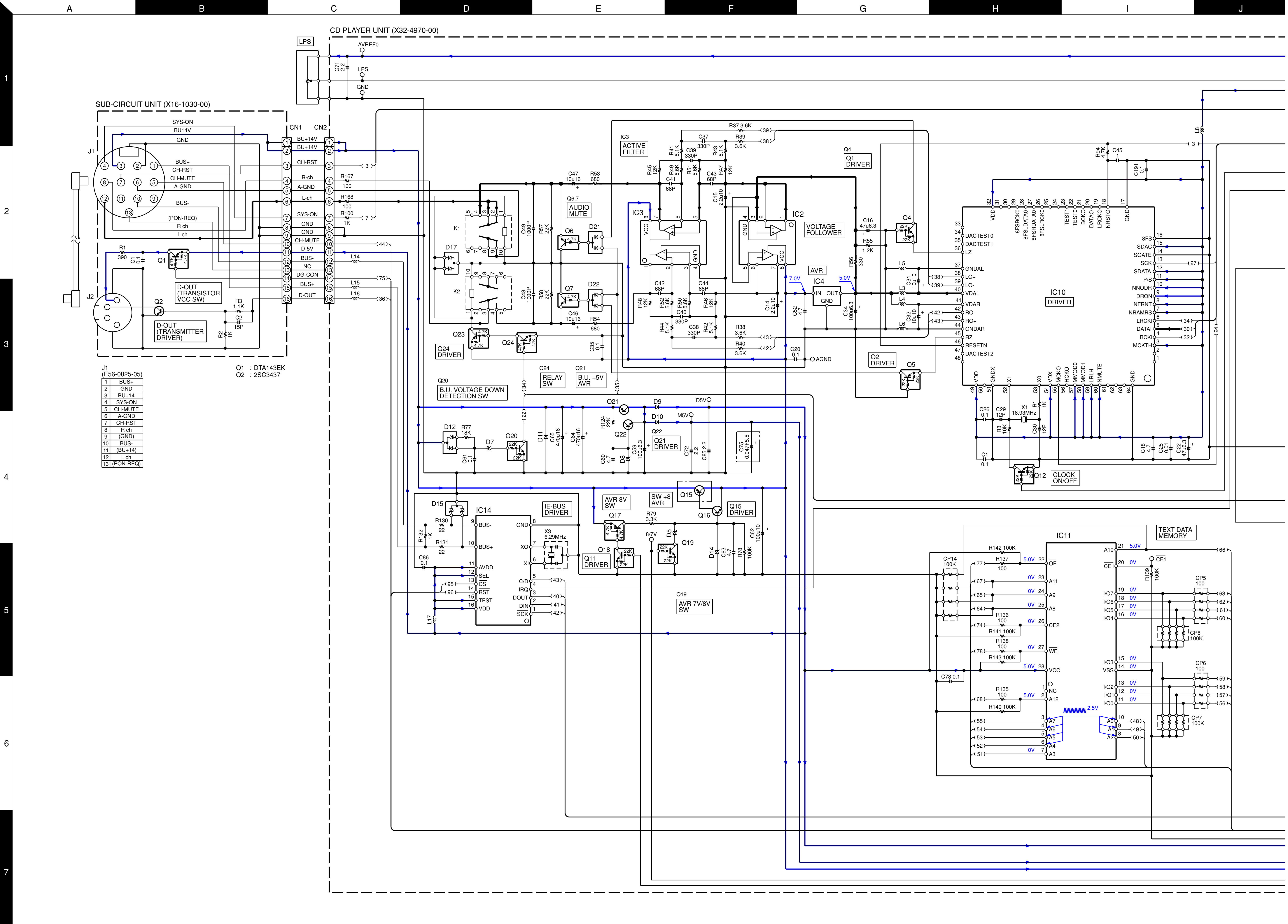
Ref.No.	IC1	IC2	IC3	IC4	IC5	IC7	IC8	IC9	IC10	IC11	IC14	Q1	Q4	Q5	Q6	Q7	Q8	Q9
Address	4P	4Q	4Q	3R	2S	4S	4R	4R	4P	3S	3S	2P	3R	3R	3R	3R	3R	2T

Ref.No.	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q31	Q32
Address	4R	4R	4P	3R	3R	5Q	5Q	5R	5R	5R	4T	5Q	5Q	2Q	2R	3S	3D	3P

(X16-)

Ref.No.	Address
Q1	5N
Q2	5N

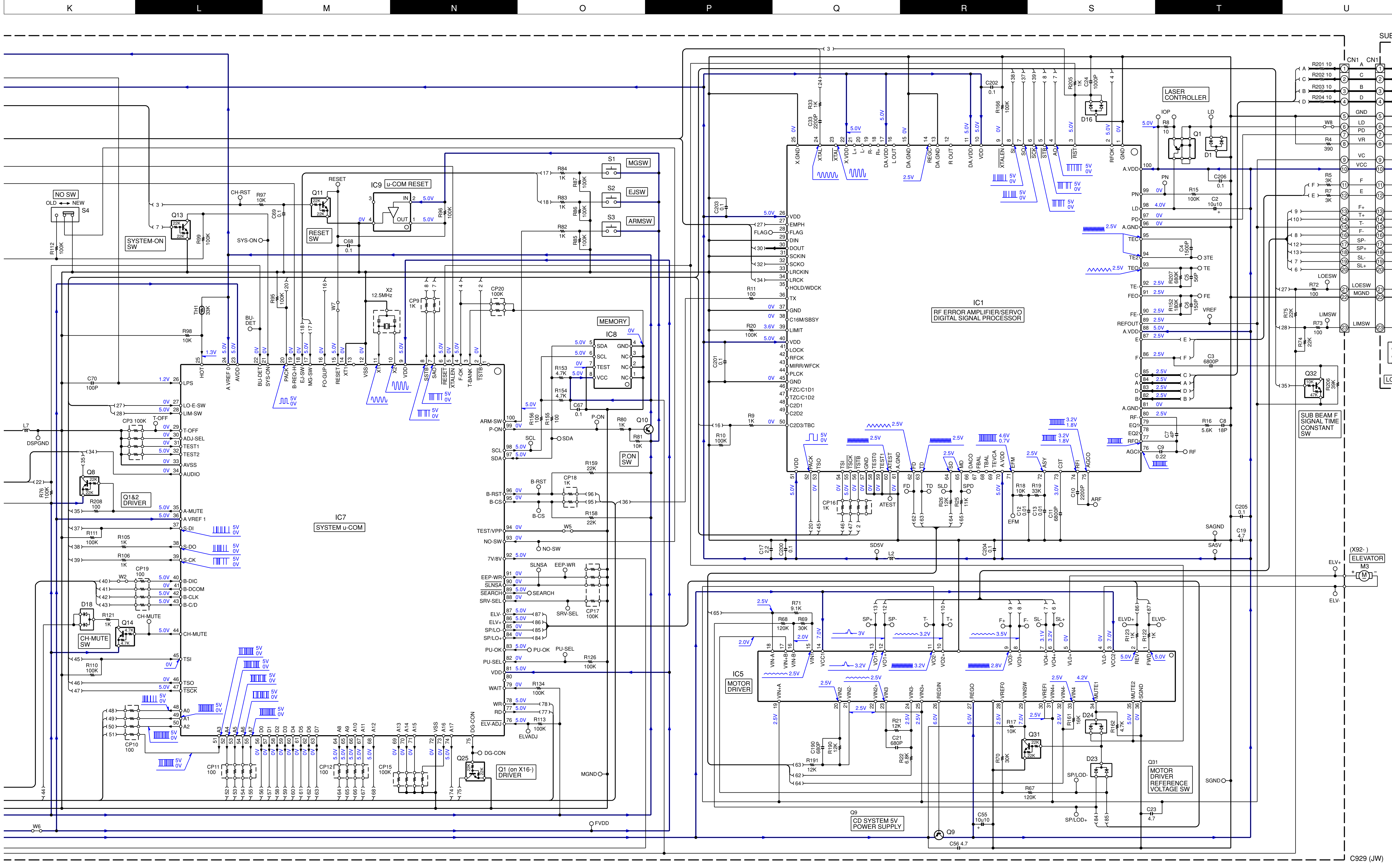
Refer to the schematic diagram for the value of resistors and capacitors.

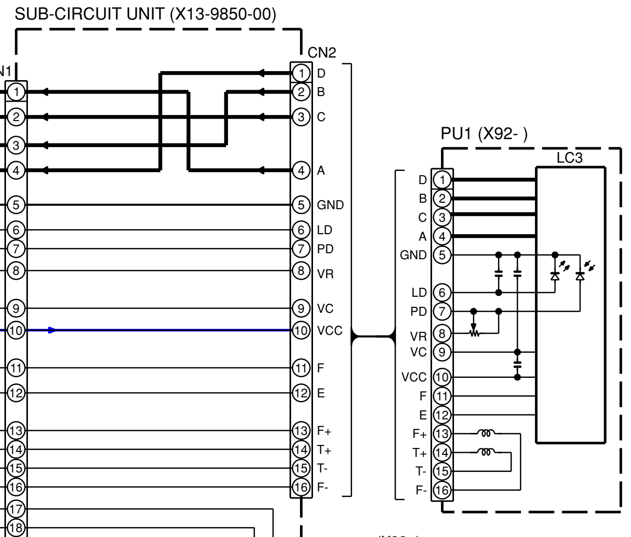

A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
CD PLAYER UNIT (X32-4970-00)
SUB-CIRCUIT UNIT (X16-1030-00)
LPS
AVREF0
GND
CN1
CN2
J1
J2
SYS-ON
BU14V
GND
BUS+
CH-RST
CH-MUTE
A-GND
BUS-
(PON-REQ)
R ch
L ch
BU+14V
R-ch
L-ch
D-5V
NC
DG-CON
D-OUT
Q1
Q2
D-OUT (TRANSISTOR VCC SW)
D-OUT (TRANSMITTER DRIVER)
R1 390
C1 0.1
R3 1.1K
C2 15P
R2 1K
R167 100
R168 100
R100 1K
L14
L15
L16
K1
K2
D17
C47 10u16
R53 680
Q6,7 AUDIO MUTE
Q6
Q7
D21
D22
C46 10u16
R54 680
C49 1000P
C48 1000P
R57 22K
R58 22K
Q23
Q24
Q24 DRIVER
Q24 RELAY SW
Q21 B.U. +5V AVR
C35 0.1
IC3 ACTIVE FILTER
IC3
IC2
VOLTAGE FOLLOWER
R37 3.6K
R39 3.6K
C37 330P
C39 330P
R41 5.1K
R43 5.1K
R45 12K
R47 12K
R49 5.6K
R51 5.6K
C41 68P
C43 68P
C15 2.2u10
C42 68P
C44 68P
R48 12K
R52 5.6K
R50 5.6K
R46 12K
C40 330P
R44 5.1K
C38 330P
R42 5.1K
R38 3.6K
R40 3.6K
C14 2.2u10
C52 47
C20 0.1
AGND
AVR
IC4
IN OUT GND
7.0V
5.0V
C34 100u6.3
R56 330
C16 47u6.3
R55 1.2K
Q4
Q4 Q1 DRIVER
Q2 DRIVER
Q5
L5
L3
L4
L6
C31 10u10
C32 10u10
IC10
DRIVER
DACTEST0
DACTEST1
LZ
GNDAL
LO+
LO-
VDAL
VDAR
RO-
RO+
GNDAR
RZ
RESETN
DACTEST2
8FS
SDAC
SGATE
SCK
SDATA
P/S
NNODR
DRON
NFRNT
NRAMRS
LRCKI
DATAI
BCKI
MCKTH
VDD
8FSBCK0
8FSLDATA0
8FSRDATA0
8FSLRCK0
TEST0
TEST1
BCKO
DATAO
LRCKO
NRSTO
GNDX
X1
X0
VDX
MCKO
HCKO
MMOD0
MMOD1
LRLH
NMUTE
L8
R94 4.7K
C45
C191 0.1
C26 0.1
C29 12P
X1 16.93MHz
R1 1K
R3 10K
C30 12P
C1 0.1
Q12
CLOCK ON/OFF
C18 4.7
C25 0.01
C22 47u6.3
Q20 B.U. VOLTAGE DOWN DETECTION SW
Q21
D9
D5V
D10
M5V
R124 22K
Q22
Q22 Q21 DRIVER
C60 4.7
D8
C59 100u6.3
C72 2.2
C85 2.2
C75 0.047F5.5
D12
R77 18K
D7
Q20
C61 0.1
D11
C65 470u16
C64 470u16
D15
IC14
IE-BUS DRIVER
R130 22
R131 22
R132 1K
C86 0.1
L17
BUS-
BUS+
AVDD
SEL
CS
RST
TEST
VDD
GND
XO
XI
C/D
IRQ
DOUT
DIN
SCK
X3 6.29MHz
AVR 8V SW
SW +8 AVR
Q15
Q15 DRIVER
Q16
Q17
Q18
Q11 DRIVER
R79 3.3K
8/7V
D5
Q19
D14
C63 4.7
R78 100K
C62 100u10
Q19 AVR 7V/8V SW
IC11
TEXT DATA MEMORY
R142 100K
R137 100
R136 100
R141 100K
R138 100
R143 100K
R135 100
R140 100K
R139 100K
CP14 100K
C73 0.1
A10
CE1
OE
A11
A9
A8
CE2
WE
VCC
NC
A12
A7
A6
A5
A4
A3
A0
A1
A2
I/O7
I/O6
I/O5
I/O4
I/O3
VSS
I/O2
I/O1
I/O0
5.0V
0V
2.5V
CP5 100
CP8 100K
CP6 100
CP7 100K

J1
(E56-0825-05)

1	BUS+
2	GND
3	BU+14
4	SYS-ON
5	CH-MUTE
6	A-GND
7	CH-RST
8	R ch
9	(GND)
10	BUS-
11	(BU+14)
12	L ch
13	(PON-REQ)

Q1 : DTA143EK
Q2 : 2SC3437


K
L
M
N
O
P
Q
R
S
T
U
IC1
RF ERROR AMPLIFIER/SERVO
DIGITAL SIGNAL PROCESSOR
IC7
SYSTEM u-COM
IC9 u-COM RESET
IC8
MEMORY
IC5
MOTOR DRIVER
LASER CONTROLLER
Q1
D1
D16
X2 12.5MHz
NO SW
OLD ← → NEW
S4
SYSTEM-ON SW
Q13
Q11
RESET SW
S1 MGSW
S2 EJSW
S3 ARMSW
Q8
Q1&2 DRIVER
D18
Q14
CH-MUTE SW
Q10
P.ON SW
Q25
Q1 (on X16-) DRIVER
Q9
CD SYSTEM 5V POWER SUPPLY
Q31
MOTOR DRIVER REFERENCE VOLTAGE SW
Q32
SUB BEAM F SIGNAL TIME CONSTANT SW
D23
D24
ELEVATOR
M3
(X92-)
ELV+
ELV-
DSPGND
FVDD
SGND
MGND
SAGND
C929 (JW)


SUB-CIRCUIT UNIT (X13-9850-00)
CN1
CN2
PU1 (X92-)
LC3
GND
LD
PD
VR
VC
VCC
F+
T+
T-
F-
SP-
SP+
SL-
SL+
LOESW
MGND
LIMSW
LOE SW
LIM SW
M GND
S1
S2
SLED
M2
SPINDLE
M1
(X92-)

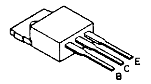
: For continued safety, replace safety critical co
manufacturer's recommended parts ⚠ (refer
tes safety critical components. For continued
k of fire, replace only with same type and rating
e risk of electric shock, leakage-current or
ents shall be carried out (exposed parts are a
rom the supply circuit) before the appliance is r
her.

(X32-)

IC1	: UPD63711AGC
IC2	: NJM4580MD
IC3	: NJM5532MD
IC4	: KIA78L05F
IC5	: LA6576
IC7	: UPD784214GC092
IC8	: S-24C02BFJA
IC9	: S-80830ANNP
IC10	: KKZ05F
IC11	: LC3564BT-70
IC14	: UPD72042BGT
Q1	: MCH6101
Q4,8	: DTA124EK
Q5	: DTA124EUA
Q6,7	: DTC343TK
Q9,21	: 2SB1202
Q10	: 2SB1295
Q11,18,20,25	: DTC124EK
Q12,13,19,31	: DTC124EUA
Q14,17,23	: DTA143EK
Q16,22	: 2SC4081
Q24	: DTC144EK
Q32	: DTC114YUA
D1,16	: DAP202U
D5	: MA8075-M
D7	: MA8056-M
D8	: MA8062-M
D9,10	: M1F60
D11	: 1SR154-400
D12	: DA204K
D14	: MA8091-M
D15	: RD6.2Z
D17,18	: DAP202K
D21,22	: DAN202K
D23,24	: DAN202U

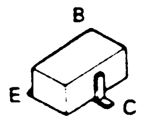
SIGNAL LINE
+B LINE

2SB1565

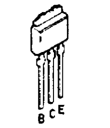


DTA124EK
DTA143EK
DTC114YUA
DTC124EK
DTC144EK

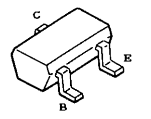
DTC343TK
2SB1295



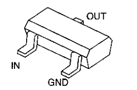
2SB1202



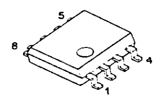
2SC4081



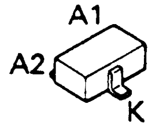
DTA124EUA
DTC124EUA



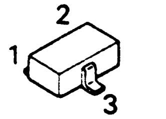
NJM5532MD



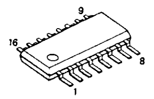
DAN202K
DAN202U



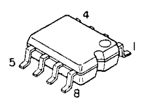
DAP202K
DAP202U
DA204K



UPD72042BGT



BR24C02F-W

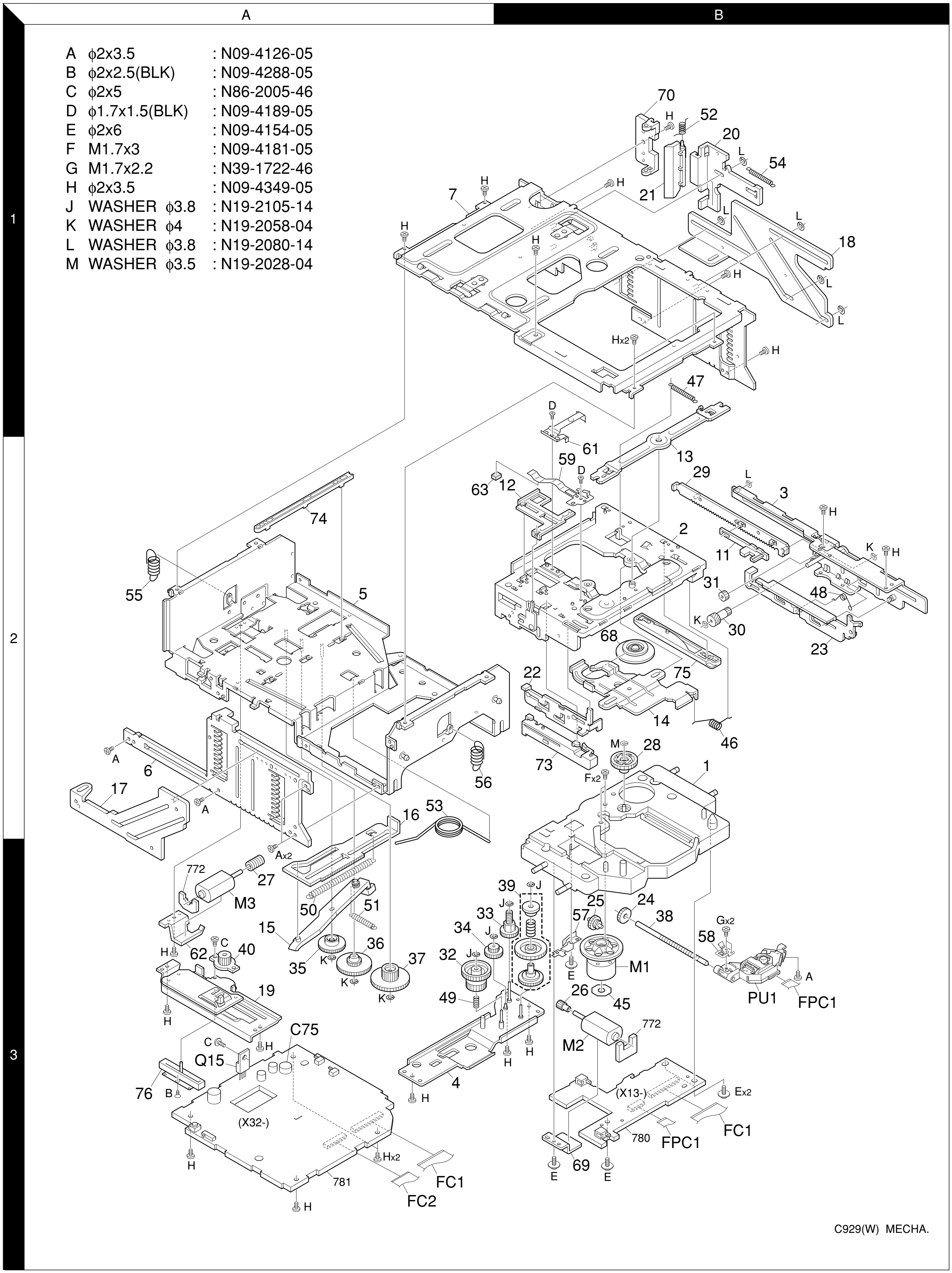


C929

KENWOOD

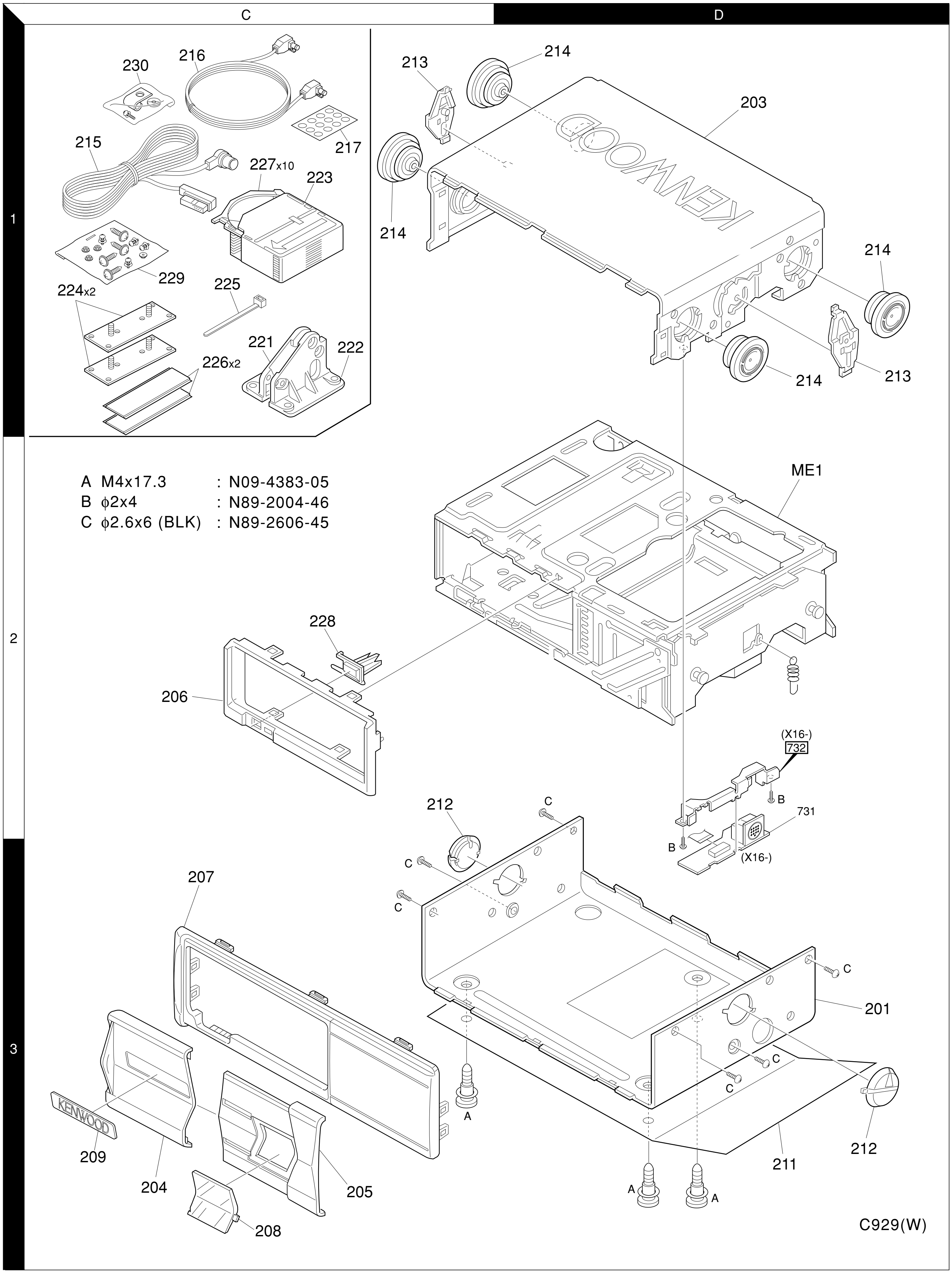
EXPLODED VIEW (MECHANISM)

A	ϕ2x3.5	: N09-4126-05
B	ϕ2x2.5(BLK)	: N09-4288-05
C	ϕ2x5	: N86-2005-46
D	ϕ1.7x1.5(BLK)	: N09-4189-05
E	ϕ2x6	: N09-4154-05
F	M1.7x3	: N09-4181-05
G	M1.7x2.2	: N39-1722-46
H	ϕ2x3.5	: N09-4349-05
J	WASHER ϕ3.8	: N19-2105-14
K	WASHER ϕ4	: N19-2058-04
L	WASHER ϕ3.8	: N19-2080-14
M	WASHER ϕ3.5	: N19-2028-04


A
B
1
2
3
70
H
52
20
L
54
H
21
7
H
H
L
18
H
L
L
Hx2
H
47
D
61
13
59
D
29
L
63
12
3
H
74
2
11
K
H
55
5
31
48
K
30
68
23
75
22
14
46
6
A
17
A
56
73
M
28
Fx2
1
53
16
Ax2
772
27
M3
39
J
J
33
25
24
50
51
57
38
15
34
Gx2
58
36
J
H
62
C
40
35
K
37
32
J
E
M1
A
K
K
26
45
PU1
FPC1
19
49
H
772
C75
C
H
H
H
M2
Q15
76
B
4
H
(X13-)
Ex2
(X32-)
780
FPC1
FC1
H
Hx2
69
E
E
781
FC1
FC2
H
C929(W) MECHA.

Parts with exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (UNIT)


C
D
1
2
3
230
216
215
217
227x10
223
229
224x2
225
221
222
226x2
213
214
203
214
214
213
214
ME1
228
206
(X16-)
732
B
731
B
(X16-)
212
C
C
C
207
C
201
C
C
212
A
211
A
A
209
204
205
208
C929(W)

A M4x17.3 : N09-4383-05
B φ2x4 : N89-2004-46
C φ2.6x6 (BLK) : N89-2606-45

Parts with exploded numbers larger than 700 are not supplied.

PARTS LIST

✻ New Parts
Parts without **Part No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	Add	New	Parts No.	Description	Desti-nation
C929					
201	3D	✻	A10-4859-01	CHASSIS	
203	1D	✻	A01-2760-11	METALLIC CABINET	
204	3C	✻	A21-4112-02	DRESSING PANEL (L)	
205	3C	✻	A21-4113-02	DRESSING PANEL (R)	
206	2C	✻	A22-2896-02	SUB PANEL	
207	3C	✻	A64-2380-01	PANEL	
208	3C	✻	B10-4059-04	FRONT GLASS	
209	3C	✻	B43-1285-04	KENWOOD BADGE	
211	3D		B58-1275-04	CAUTION CARD (TRANS. SCREW)	
-			B46-0100-50	WARRANTY CARD	
-			B46-0182-14	ID CARD	
-			B58-1236-04	CAUTION CARD (CONNECTION CABLE)	
-		✻	B58-1367-04	CAUTION CARD (SCREW FOR HOLDER)	
-		✻	B64-1936-00	INST. MANUAL (ENG,FRE,SPA,POR)	
-		✻	B64-1937-00	INST. MANUAL (GER,DUT,ITA)	
-		✻	B64-1938-00	INST. MANUAL (CHI,KOR)	
212	3D		D10-4515-03	ARM	
213	1C		D10-4516-04	LEVER	
214	1C		D39-0242-05	DAMPER	
215	1C		E30-4591-05	CORD WITH CONNECTOR	
216	1C	✻	E30-4961-05	CORD WITH CONNECTOR (WITH CAP)	
217	1C		F19-1303-04	BLIND PLATE	
-			H02-0827-03	INNER CARTON CASE (CD MAGAZINE)	
-			H10-4729-02	POLYSTYRENE FOAMED FIXTURE	
-		✻	H12-2693-04	PACKING FIXTURE	
-			H13-1706-04	CARTON BOARD	
-			H25-0337-04	PROTECTION BAG (180X300X0.03)	
-			H25-1115-04	PROTECTION BAG	
-		✻	H54-2152-04	ITEM CARTON CASE	
221	1C		J19-5018-03	BRACKET (L)	
222	1C		J19-5019-03	BRACKET (R)	
223	1C		J19-5074-02	HOLDER ASSY	
224	1C		J21-9588-04	MOUNTING HARDWARE ASSY	
225	1C		J61-0074-05	WIRE BAND	
226	1C		J69-0506-04	ADHESIVE TAPE	
227	1C		J99-0612-01	TRAY	
228	2C		K24-3629-04	KNOB (EJECT)	
229	1C		N99-1628-15	SCREW SET (12-SCREW)	
230	1C	✻	N99-1706-05	SCREW SET (3-PIECE)	
A	3D		N09-4383-05	STEPPED SCREW	
B	2D		N89-2004-46	BINDING HEAD TAPTITE SCREW	
C	3D		N89-2606-45	BINDING HEAD TAPTITE SCREW	
ME1	2D	✻	X92-4020-00	MECHANISM ASSY	
SUB-CIRCUIT UNIT (X13-9850-00)					
CN1			E40-9487-05	FLAT CABLE CONNECTOR	
CN2			E40-9536-05	FLAT CABLE CONNECTOR	
S1 ,2			S74-0811-05	MICRO SWITCH	

(X16-1030-00)

Ref. No.	Add	New	Parts No.	Description	Desti-nation
SUB-CIRCUIT UNIT (X16-1030-00)					
C1			CK73GB1C104K	CHIP C 0.10UF K	
C2			CC73GCH1H150J	CHIP C 15PF J	
CN1			E40-9555-05	FLAT CABLE CONNECTOR	
J1			E56-0825-05	CYLINDRICAL RECEPTACLE	
J2			E56-0817-05	CYLINDRICAL RECEPTACLE	
R1			RK73EB2B391J	CHIP R 390 J 1/8W	
R2			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R3			RK73GB1J112J	CHIP R 1.1K J 1/16W	
Q1			DTA143EK	DIGITAL TRANSISTOR	
Q2			2SC3437	TRANSISTOR	
CD PLAYER UNIT (X32-4970-00)					
C1			CK73GB1C104K	CHIP C 0.10UF K	
C2			C92-0628-05	CHIP-TAN 10UF 10WV	
C3			CK73GB1H682K	CHIP C 6800PF K	
C4			CK73GB1H152K	CHIP C 1500PF K	
C5			CC73GCH1H560J	CHIP C 56PF J	
C6			CC73GCH1H151J	CHIP C 150PF J	
C7			CC73GCH1H040C	CHIP C 4.0PF C	
C8			CC73GCH1H180J	CHIP C 18PF J	
C9			CK73GB1A224K	CHIP C 0.22UF K	
C10			CK73GB1H222K	CHIP C 2200PF K	
C11			CK73GB1H682K	CHIP C 6800PF K	
C12 ,13			CK73GB1H103K	CHIP C 0.010UF K	
C14 ,15			C92-0514-05	CHIP-TAN 2.2UF 10WV	
C16			C92-1389-05	ELECTRO 47UF 6.3WV	
C17			CK73FB1A225K	CHIP C 2.2UF K	
C18			CK73EB1A475K	CHIP C 4.7UF K	
C19			CK73FB1A225K	CHIP C 2.2UF K	
C20			CK73GB1C104K	CHIP C 0.10UF K	
C21			CK73GB1H681K	CHIP C 680PF K	
C22			C92-1389-05	ELECTRO 47UF 6.3WV	
C23			CK73EB1A475K	CHIP C 4.7UF K	
C24			CK73GB1H102K	CHIP C 1000PF K	
C25			CK73GB1H103K	CHIP C 0.010UF K	
C26			CK73GB1C104K	CHIP C 0.10UF K	
C29 ,30			CC73GCH1H120J	CHIP C 12PF J	
C31 ,32			C92-0628-05	CHIP-TAN 10UF 10WV	
C33			CK73GB1H222K	CHIP C 2200PF K	
C34			C92-1390-05	ELECTRO 100UF 6.3WV	
C35			CK73GB1C104K	CHIP C 0.10UF K	
C37 -40			CK73GB1H331K	CHIP C 330PF K	
C41 -44			CC73GCH1H680J	CHIP C 68PF J	
C45			CK73GB0J105K	CHIP C 1.0UF K	
C46 ,47			C92-1393-05	ELECTRO 10UF 16WV	
C48 ,49			CK73GB1H102K	CHIP C 1000PF K	
C52			CK73EB1A475K	CHIP C 4.7UF K	
C55			C92-0628-05	CHIP-TAN 10UF 10WV	
C56			CK73EB1A475K	CHIP C 4.7UF K	
C59			C92-1390-05	ELECTRO 100UF 6.3WV	
C60			CK73EB1A475K	CHIP C 4.7UF K	
C61			CK73GB1C104K	CHIP C 0.10UF K	

E : Europe **K** : North America **M** : Other Areas

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(X32-4970-00)

Ref. No.	Add	New	Parts No.	Description	Destination
C62			C92-1392-05	ELECTRO 100UF 10WV	
C63			CK73EB1A475K	CHIP C 4.7UF K	
C64 ,65			C92-1388-05	ELECTRO 470UF 16WV	
C67 -69			CK73GB1C104K	CHIP C 0.10UF K	
C70			CC73GCH1H101J	CHIP C 100PF J	
C71 ,72			CK73FB1A225K	CHIP C 2.2UF K	
C73			CK73GB1C104K	CHIP C 0.10UF K	
C85			CK73FB1A225K	CHIP C 2.2UF K	
C86			CK73GB1C104K	CHIP C 0.10UF K	
C190			CK73GB1H681K	CHIP C 680PF K	
C191			CK73GB1C104K	CHIP C 0.10UF K	
C200-206			CK73GB1C104K	CHIP C 0.10UF K	
CN1			E40-9338-05	FLAT CABLE CONNECTOR	
CN2			E40-9404-05	FLAT CABLE CONNECTOR	
L2			L92-0322-05	CHIP FERRITE	
L3 -8			L92-0314-05	CHIP FERRITE	
L14 ,15			L92-0319-05	CHIP FERRITE	
L16 ,17			L92-0314-05	CHIP FERRITE	
X1			L77-2081-05	CRYSTAL RESONATOR	
X2			L78-0568-05	RESONATOR	
X3			L78-0576-05	RESONATOR (6.29MHZ)	
CP3			R90-0720-05	MULTI-COMP 100K X4	
CP5 ,6			R90-1014-05	MULTI-COMP 100 X4	
CP7 ,8			R90-0720-05	MULTI-COMP 100K X4	
CP9			R90-0725-05	MULTI-COMP 1K X2	
CP10-12			R90-1014-05	MULTI-COMP 100 X4	
CP14,15			R90-0720-05	MULTI-COMP 100K X4	
CP16			R90-0724-05	MULTI-COMP 1K X4	
CP17			R90-0720-05	MULTI-COMP 100K X4	
CP18			R90-0725-05	MULTI-COMP 1K X2	
CP19			R90-1014-05	MULTI-COMP 100 X4	
CP20			R90-0737-05	MULTI-COMP 100K X2	
R1			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R3			RK73GB1J103J	CHIP R 10K J 1/16W	
R4			RK73GB1J391J	CHIP R 390 J 1/16W	
R5			RK73GB1J302J	CHIP R 3.0K J 1/16W	
R7			RK73GB1J302J	CHIP R 3.0K J 1/16W	
R8			RK73EB2B100J	CHIP R 10 J 1/8W	
R9			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R10			RK73GB1J104J	CHIP R 100K J 1/16W	
R11			RK73GB1J101J	CHIP R 100 J 1/16W	
R15			RK73GB1J104J	CHIP R 100K J 1/16W	
R16			RK73GB1J562J	CHIP R 5.6K J 1/16W	
R17			RK73EB2B103J	CHIP R 10K J 1/8W	
R18			RK73GB1J103J	CHIP R 10K J 1/16W	
R19			RK73GB1J333J	CHIP R 33K J 1/16W	
R20			RK73GB1J104J	CHIP R 100K J 1/16W	
R21			RK73GB1J123J	CHIP R 12K J 1/16W	
R22			RK73GB1J682J	CHIP R 6.8K J 1/16W	
R25			RK73GB1J113J	CHIP R 11K J 1/16W	
R26			RK73EB2B123J	CHIP R 12K J 1/8W	
R33			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R37 -40			RK73GB1J362J	CHIP R 3.6K J 1/16W	
R41 -44			RK73GB1J512J	CHIP R 5.1K J 1/16W	
R45 -48			RK73GB1J123J	CHIP R 12K J 1/16W	
R49 -52			RK73GB1J562J	CHIP R 5.6K J 1/16W	
R53 ,54			RK73GB1J681J	CHIP R 680 J 1/16W	
R55			RK73GB1J122J	CHIP R 1.2K J 1/16W	
R56			RK73GB1J331J	CHIP R 330 J 1/16W	
R57 ,58			RK73GB1J223J	CHIP R 22K J 1/16W	
R67			RK73GB1J124J	CHIP R 120K J 1/16W	
R68			RK73EB2B124J	CHIP R 120K J 1/8W	
R69 ,70			RK73GB1J303J	CHIP R 30K J 1/16W	
R71			RK73GB1J912J	CHIP R 9.1K J 1/16W	
R72 ,73			RK73GB1J101J	CHIP R 100 J 1/16W	
R74 ,75			RK73GB1J223J	CHIP R 22K J 1/16W	
R76			RK73GB1J104J	CHIP R 100K J 1/16W	
R77			RK73GB1J183J	CHIP R 18K J 1/16W	
R78			RK73GB1J104J	CHIP R 100K J 1/16W	
R79			RK73GB1J332J	CHIP R 3.3K J 1/16W	
R80			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R81			RK73GB1J103J	CHIP R 10K J 1/16W	
R82 -84			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R85 -87			RK73GB1J104J	CHIP R 100K J 1/16W	
R94			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R95 ,96			RK73GB1J104J	CHIP R 100K J 1/16W	
R97 ,98			RK73GB1J103J	CHIP R 10K J 1/16W	
R99			RK73GB1J104J	CHIP R 100K J 1/16W	
R100			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R105,106			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R110-113			RK73GB1J104J	CHIP R 100K J 1/16W	
R121-123			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R124			RK73GB1J223J	CHIP R 22K J 1/16W	
R126			RK73GB1J104J	CHIP R 100K J 1/16W	
R130,131			RK73GB1J220J	CHIP R 22 J 1/16W	
R132			RK73GB1J102J	CHIP R 1.0K J 1/16W	
R134			RK73GB1J104J	CHIP R 100K J 1/16W	
R135-138			RK73GB1J101J	CHIP R 100 J 1/16W	
R139-143			RK73GB1J104J	CHIP R 100K J 1/16W	
R152			RK73GB1J184J	CHIP R 180K J 1/16W	
R153,154			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R155,156			RK73GB1J101J	CHIP R 100 J 1/16W	
R158,159			RK73GB1J223J	CHIP R 22K J 1/16W	
R161			RK73GB1J163J	CHIP R 16K J 1/16W	
R162			RK73GB1J472J	CHIP R 4.7K J 1/16W	
R166			RK73GB1J104J	CHIP R 100K J 1/16W	
R167,168			RK73EB2B101J	CHIP R 100 J 1/8W	
R190,191			RK73GB1J123J	CHIP R 12K J 1/16W	
R201-204			RK73GB1J100J	CHIP R 10 J 1/16W	
R205			RK73EB2B102J	CHIP R 1.0K J 1/8W	
R206			RK73GB1J393J	CHIP R 39K J 1/16W	
R207			RK73GB1J684J	CHIP R 680K J 1/16W	
R208			RK73EB2B101J	CHIP R 100 J 1/8W	
W2			R92-1252-05	CHIP R 0 OHM	
W5 -7			R92-1252-05	CHIP R 0 OHM	
W8			R92-2053-05	CHIP R 0 J 1/8W	
K1 ,2			S76-0808-05	MAGNETIC RELAY	

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Ref. No.	Add	New	Parts No.	Description	Destination
S1			S68-0823-05	PUSH SWITCH	
S2			S70-0838-05	TACT SWITCH	
S3			S68-0823-05	PUSH SWITCH	
S4			S62-0863-05	SLIDE SWITCH	
D1			DAP202U	DIODE	
D5			MA8075-M	ZENER DIODE	
D7			MA8056-M	ZENER DIODE	
D8			MA8062-M	ZENER DIODE	
D9 ,10			M1F60	DIODE	
D11			1SR154-400	DIODE	
D12			DA204K	DIODE	
D14			MA8091-M	ZENER DIODE	
D15			RD6.2Z	ZENER DIODE	
D16			DAP202U	DIODE	
D17 ,18			DAP202K	DIODE	
D21 ,22			DAN202K	DIODE	
D23 ,24			DAN202U	DIODE	
IC1			UPD63711AGC	MOS-IC	
IC2			NJM4580MD	ANALOGUE IC	
IC3			NJM5532MD	IC(OP AMP)	
IC4			KIA78L05F	ANALOGUE IC	
IC5			LA6576	ANALOGUE IC	
IC7			UPD784214GC092	MI-COM IC	
IC8			BR24C02F-W	MEMORY IC	
IC8			CAT24WC02JI	MEMORY IC	
IC8			M24C02WMN6T	MEMORY IC	
IC8			S-24C02BFJA	MEMORY IC	
IC9			S-80830ANNP	MOS-IC	
IC10			KKZ05F	CUSTOM IC	
IC11			LC3564BT-70	MEMORY IC	
IC14			UPD72042BGT	MOS-IC	
Q1			MCH6101	TRANSISTOR	
Q4			DTA124EK	DIGITAL TRANSISTOR	
Q5			DTA124EUA	DIGITAL TRANSISTOR	
Q6 ,7			DTC343TK	DIGITAL TRANSISTOR	
Q8			DTA124EK	DIGITAL TRANSISTOR	
Q9			2SB1202	TRANSISTOR	
Q10			2SB1295	TRANSISTOR	
Q11			DTC124EK	DIGITAL TRANSISTOR	
Q12 ,13			DTC124EUA	DIGITAL TRANSISTOR	
Q14			DTA143EK	DIGITAL TRANSISTOR	
Q16			2SC4081	TRANSISTOR	
Q17			DTA143EK	DIGITAL TRANSISTOR	
Q18			DTC124EK	DIGITAL TRANSISTOR	
Q19			DTC124EUA	DIGITAL TRANSISTOR	
Q20			DTC124EK	DIGITAL TRANSISTOR	
Q21			2SB1202	TRANSISTOR	
Q22			2SC4081	TRANSISTOR	
Q23			DTA143EK	DIGITAL TRANSISTOR	
Q24			DTC144EK	DIGITAL TRANSISTOR	
Q25			DTC124EK	DIGITAL TRANSISTOR	
Q31			DTC124EUA	DIGITAL TRANSISTOR	
Q32			DTC114YUA	DIGITAL TRANSISTOR	
TH1			NTH5G20B333K07	THERMISTOR	

(X92-4020-00)

Ref. No.	Add	New	Parts No.	Description	Destination
MECHANISM ASSY (X92-4020-00)					
1	2B		A10-4745-03	CHASSIS ASSY	
2	2B		A10-4748-02	CHASSIS CALKING ASSY	
3	2B		A10-4751-03	CHASSIS CALKING ASSY	
4	3A		A10-4754-04	CHASSIS CALKING ASSY	
5	2A		A10-4757-02	CHASSIS CALKING ASSY	
6	2A		A10-4759-02	CHASSIS	
7	1A		A10-4760-02	CHASSIS CALKING ASSY	
C75	3A		C90-2945-05	ELECTRO 0.047F 5.5WV	
11	2B		D10-4293-03	ARM	
12	2A		D10-4527-03	SLIDER	
13	2B		D10-4528-03	ARM	
14	2B		D10-4529-03	LEVER	
15	3A		D10-4531-04	LEVER ASSY	
16	2A		D10-4533-03	LEVER	
17	2A		D10-4534-04	SLIDER ASSY	
18	1B		D10-4536-13	SLIDER	
19	3A		D10-4537-04	SLIDER ASSY	
20	1B		D10-4540-13	ARM	
21	1B		D10-4547-03	LEVER	
22	2B		D12-0630-02	CAM	
23	2B		D12-0631-02	CAM	
24	3B		D13-2185-04	GEAR	
25	3B		D13-2186-04	GEAR	
26	3B		D13-2187-04	GEAR	
27	3A		D13-2188-04	WORM	
28	2B		D13-2092-04	GEAR	
29	2B		D13-2093-04	GEAR ASSY	
30	2B		D13-2095-04	GEAR	
31	2B		D13-2096-04	GEAR	
32	3A		D13-2099-04	GEAR	
33	3A		D13-2100-04	GEAR	
34	3A		D13-2101-04	GEAR	
35	3A		D13-2102-04	GEAR	
36	3A		D13-2103-04	GEAR	
37	3A		D13-2104-04	GEAR	
38	3B		D19-0636-04	LEAD SCREW	
39	3A		D19-0637-04	CLUTCH ASSY	
40	3A		D39-0225-05	DAMPER	
FC1	3A		E39-0172-15	FLAT CABLE (23P)	
FC2	3A		E39-0173-15	FLAT CABLE (16P)	
45	3B		F09-1645-04	SHEET	
46	2B		G01-3036-04	TORSION COIL SPRING	
47	1B		G01-3037-04	EXTENSION COIL SPRING	
48	2B		G01-3038-04	TORSION COIL SPRING	
49	3A		G01-3039-04	COMPRESSION COIL SPRING	
50	3A		G01-3040-04	EXTENSION COIL SPRING	
51	3A		G01-3041-04	EXTENSION COIL SPRING	
52	1B		G01-3042-04	TORSION COIL SPRING	
53	2A		G01-3043-04	TORSION COIL SPRING	
54	1B		G01-3044-04	EXTENSION COIL SPRING	
55	2A		G01-3045-04	EXTENSION COIL SPRING (BLACK)	

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Ref. No.	Add	New	Parts No.	Description	Desti-nation
56	2A		G01-3046-04	EXTENSION COIL SPRING (SILVER)	
57	3B		G02-1374-04	FLAT SPRING	
58	3B		G02-1375-03	FLAT SPRING	
59	2B		G02-1376-03	FLAT SPRING	
61	2B		G02-1378-04	FLAT SPRING	
62	3A		G02-1380-04	FLAT SPRING	
63	2A		G10-1045-14	FELT	
68	2B		J11-0637-03	CLAMPER	
69	3B		J21-9592-04	MOUNTING HARDWARE	
70	1B		J21-9595-03	MOUNTING HARDWARE	
73	2B		J90-0759-03	GUIDE	
74	2A		J90-0760-03	RAIL	
75	2B		J90-0777-23	GUIDE	
FPC1	3B		J84-0099-05	RIGID PRINTED WIRING BOARD	
A	2A		N09-4126-05	MACHINE SCREW (2X3.5)	
B	3A		N09-4288-05	TAPTITE SCREW (2X2.5)	
C	3A		N86-2005-46	BINDING HEAD TAPTITE SCREW	
D	2B		N09-4189-05	TAPTITE SCREW (1.7X1.5)	
E	3B		N09-4154-05	TAPTITE SCREW (2X6)	
F	2B		N09-4181-05	MACHINE SCREW (M1.7X3)	
G	3B		N39-1722-46	PAN HEAD MACHINE SCREW	
H	1A		N09-4349-05	TAPTITE SCREW (2X3.5)	
J	3A		N19-2105-14	FLAT WASHER (1.55X3.8X0.35)	
K	3A		N19-2058-04	FLAT WASHER (1.6X4X0.25)	
L	1B		N19-2080-14	FLAT WASHER (1.55X3.8X0.3)	
M	2B		N19-2028-04	FLAT WASHER (1.6X3.5X0.25)	
76	3A		R33-0207-05	SLIDE TYPE VARIABLE RESISTOR	
M1	3B		T42-0797-04	MOTOR ASSY	
M2 ,3	3A		T42-0788-05	DC MOTOR	
PU1	3B		T25-0216-05	OPTICAL PICKUP HEAD	
Q15	3A		2SB1565(E,F)	TRANSISTOR	

Ref. No.	Add	New	Parts No.	Description	Desti-nation

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SPECIFICATIONS

CD	Laser Diode	GaAlAs (λ=780nm)
	Digital Filter (D/A)	8 Times Over Sampling
	D/A Converter	1 Bit
	Spindle Speed	200rpm-500rpm (CLV)
	Wow & Flutter	Below Mesurable Limit
	Frequency Response	5Hz-20KHz (±1dB)
	Total Harmonic Distortion	0.005% (1KHz)
	S/N Ratio	110dB (1KHz)
	Dinamic Range	96dB
	Channel Separation	96dB
GENERAL	Operating Voltage (11V-16V allowable)	14.4V
	Current Consumption	0.8A
	Installation Size (Width)	250mm
	(Height)	80mm
	(Depth)	176mm
	Weight	2.0Kg

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

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46300 Petaling Jaya, Selangor Darul Ehsan, Malaysia

22366

CD AUTO CHANGER

KDC-C710

SERVICE MANUAL

KENWOOD

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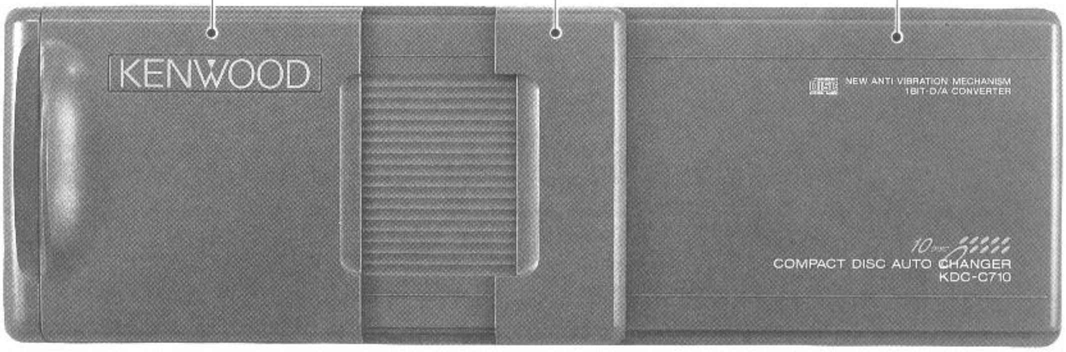
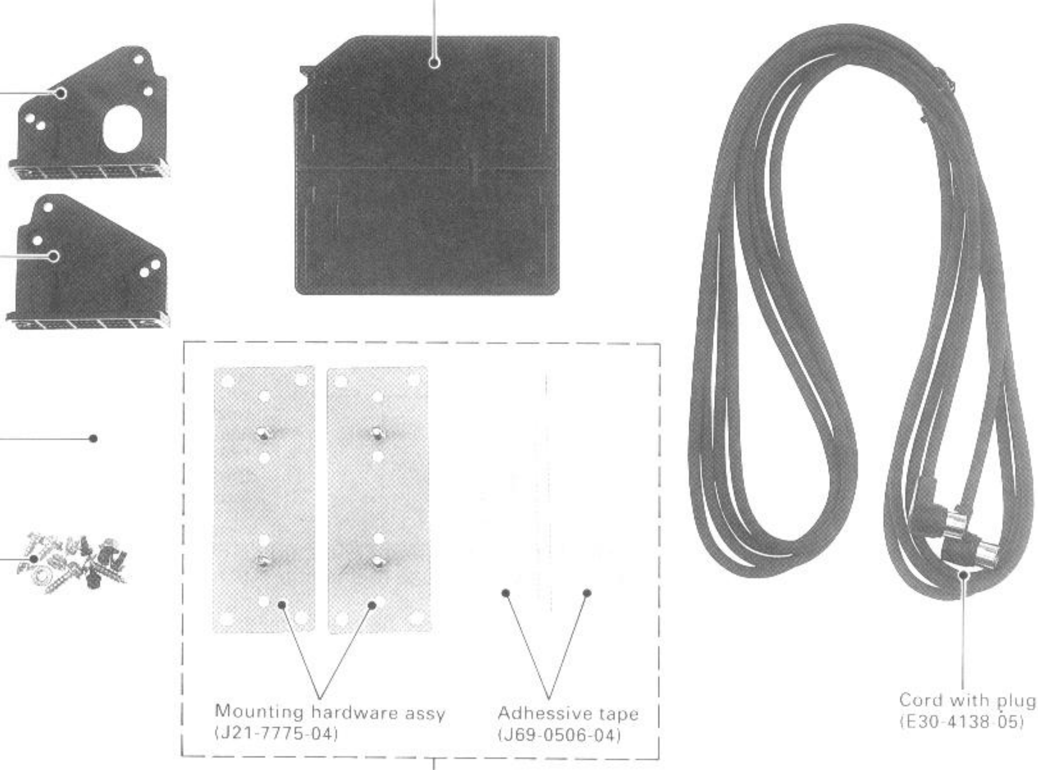
B51-7104-00(MC)3595


Dressing panel (A21-2351-02)
Dressing panel (A21-2353-12)
Panel (A64-1026-01)
KENWOOD
NEW ANTI VIBRATION MECHANISM
1BIT-D/A CONVERTER
10
COMPACT DISC AUTO CHANGER
KDC-C710


Holder assy (magazine) (J19-4676-02)
Bracket (R) (J19-4711-13)
Bracket (L) (J19-4710-13)
Blind plate (F19-1303-04)
Screw set
K/E type: (N99-1645-05)
M type: (N99-1628-15)
Mounting hardware assy (J21-7775-04)
Adhesive tape (J69-0506-04)
M type only
Cord with plug (E30-4138-05)

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CONNECTIONS

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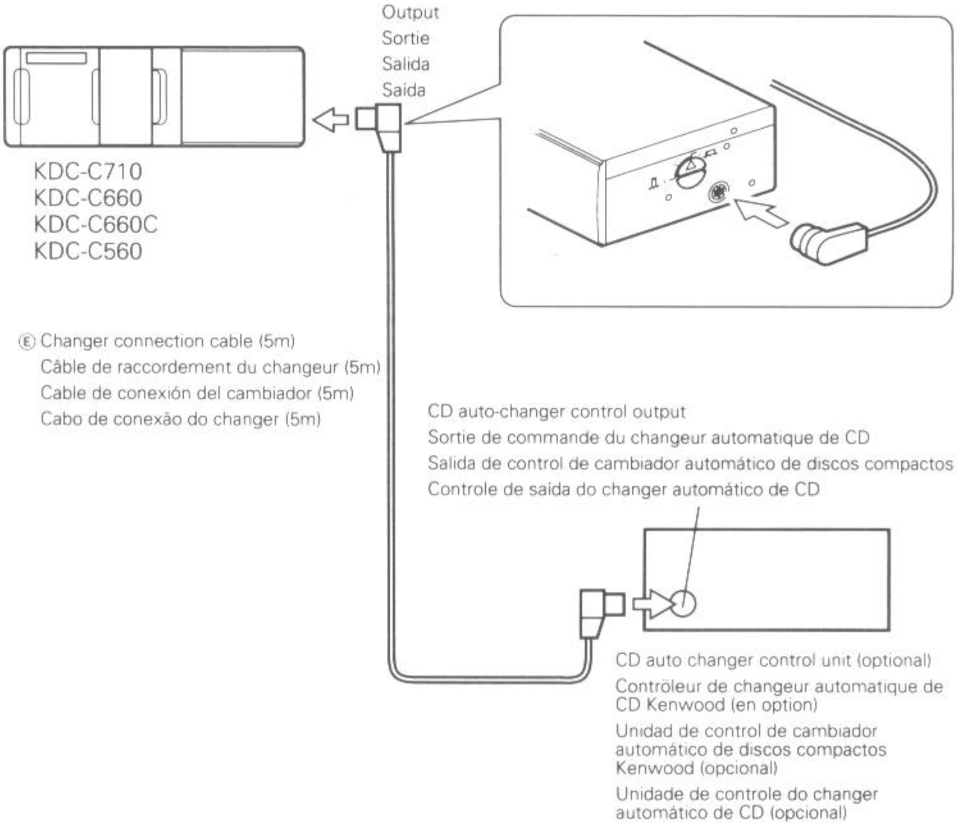
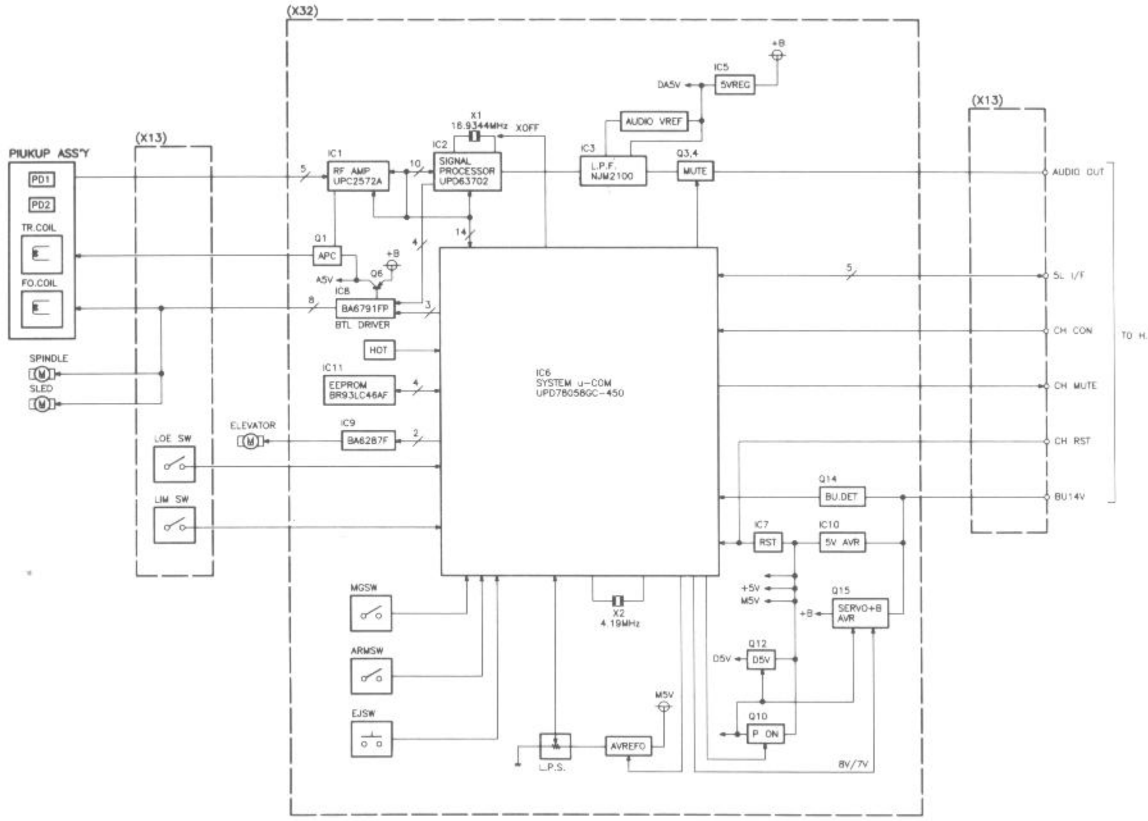
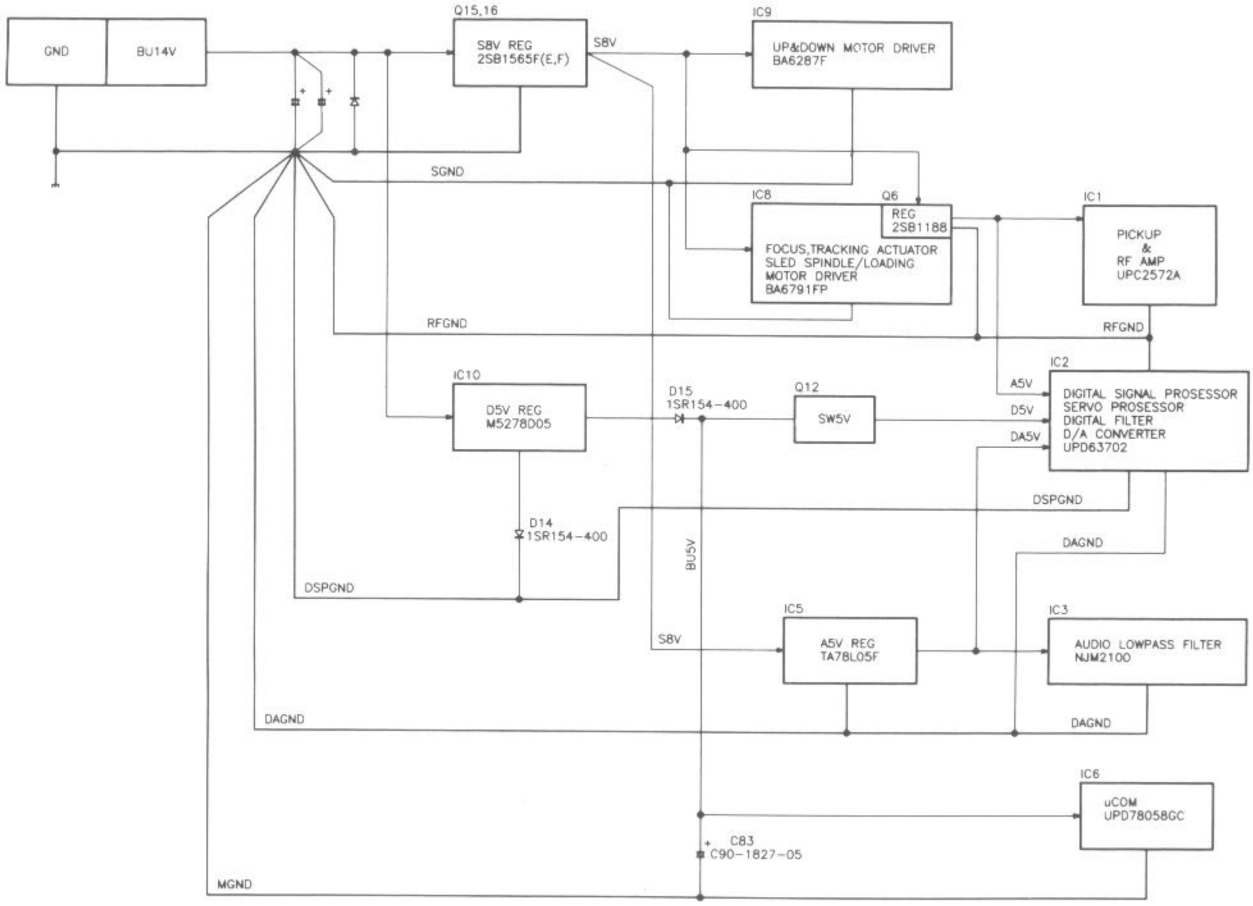

Output
Sortie
Salida
Saida
KDC-C710
KDC-C660
KDC-C660C
KDC-C560
Ⓔ Changer connection cable (5m)
Câble de raccordement du changeur (5m)
Cable de conexión del cambiador (5m)
Cabo de conexão do changer (5m)
CD auto-changer control output
Sortie de commande du changeur automatique de CD
Salida de control de cambiador automático de discos compactos
Controle de saída do changer automático de CD
CD auto changer control unit (optional)
Contrôleur de changeur automatique de CD Kenwood (en option)
Unidad de control de cambiador automático de discos compactos Kenwood (opcional)
Unidade de controle do changer automático de CD (opcional)

- Do not install an antenna of radio equipment or distribute the antenna cable near the changer output cable, for this could cause malfunction with this unit.
- Sous peine de provoquer une défaillance, ne pas installer l'antenne d'un équipement radio ou faire passer le câble d'antenne près du câble de sortie du changeur.
- No instale una antena de un equipo de radio ni los cables de la antena cerca del cable de salida del cambiador porque esto podría ser la causa de que este aparato funcione mal.
- Não instale a antena do equipamento de rádio ou deixe o cabo da antena ficar perto do cabo de saída do changer, pois isso pode provocar problemas de mau funcionamento neste aparelho.

BLOCK DIAGRAM


(X32)
PIUKUP ASS'Y
PD1
PD2
TR.COIL
FO.COIL
SPINDLE
SLED
(X13)
LOE SW
LIM SW
ELEVATOR
IC1
RF AMP
UPC2572A
5
10
X1
16.9344MHz
XOFF
IC2
SIGNAL PROCESSOR
UPD63702
14
4
Q1
APC
+B
A5V
Q6
IC8
8
BA6791FP
BTL DRIVER
3
HOT
IC11
EEPROM
BR93LC46AF
4
IC9
BA6287F
2
IC6
SYSTEM u-COM
UPD78058GC-450
IC5
5VREG
DA5V
+B
AUDIO VREF
IC3
L.P.F.
NJM2100
Q3,4
MUTE
5
(X13)
AUDIO OUT
SL I/F
CH CON
CH MUTE
CH RST
BU14V
TO H.U
Q14
BU.DET
IC7
RST
IC10
5V AVR
+5V
M5V
Q15
SERVO+B
AVR
+B
Q12
D5V
D5V
Q10
P ON
8V/7V
MGSW
ARMSW
EJSW
X2
4.19MHz
M5V
L.P.S.
AVREFO


GND
BU14V
Q15,16
S8V REG
2SB1565F(E,F)
S8V
IC9
UP&DOWN MOTOR DRIVER
BA6287F
SGND
IC8
Q6
REG
2SB1188
FOCUS,TRACKING ACTUATOR
SLED SPINDLE/LOADING
MOTOR DRIVER
BA6791FP
IC1
PICKUP
&
RF AMP
UPC2572A
RFGND
RFGND
IC2
A5V
D5V
DA5V
DIGITAL SIGNAL PROSESSOR
SERVO PROSESSOR
DIGITAL FILTER
D/A CONVERTER
UPD63702
IC10
D5V REG
M5278D05
D15
1SR154-400
Q12
SW5V
D14
1SR154-400
DSPGND
DSPGND
DAGND
BU5V
S8V
IC5
A5V REG
TA78L05F
IC3
AUDIO LOWPASS FILTER
NJM2100
DAGND
DAGND
IC6
uCOM
UPD78058GC
C83
C90-1827-05
MGND

COMPONENTS DESCRIPTION

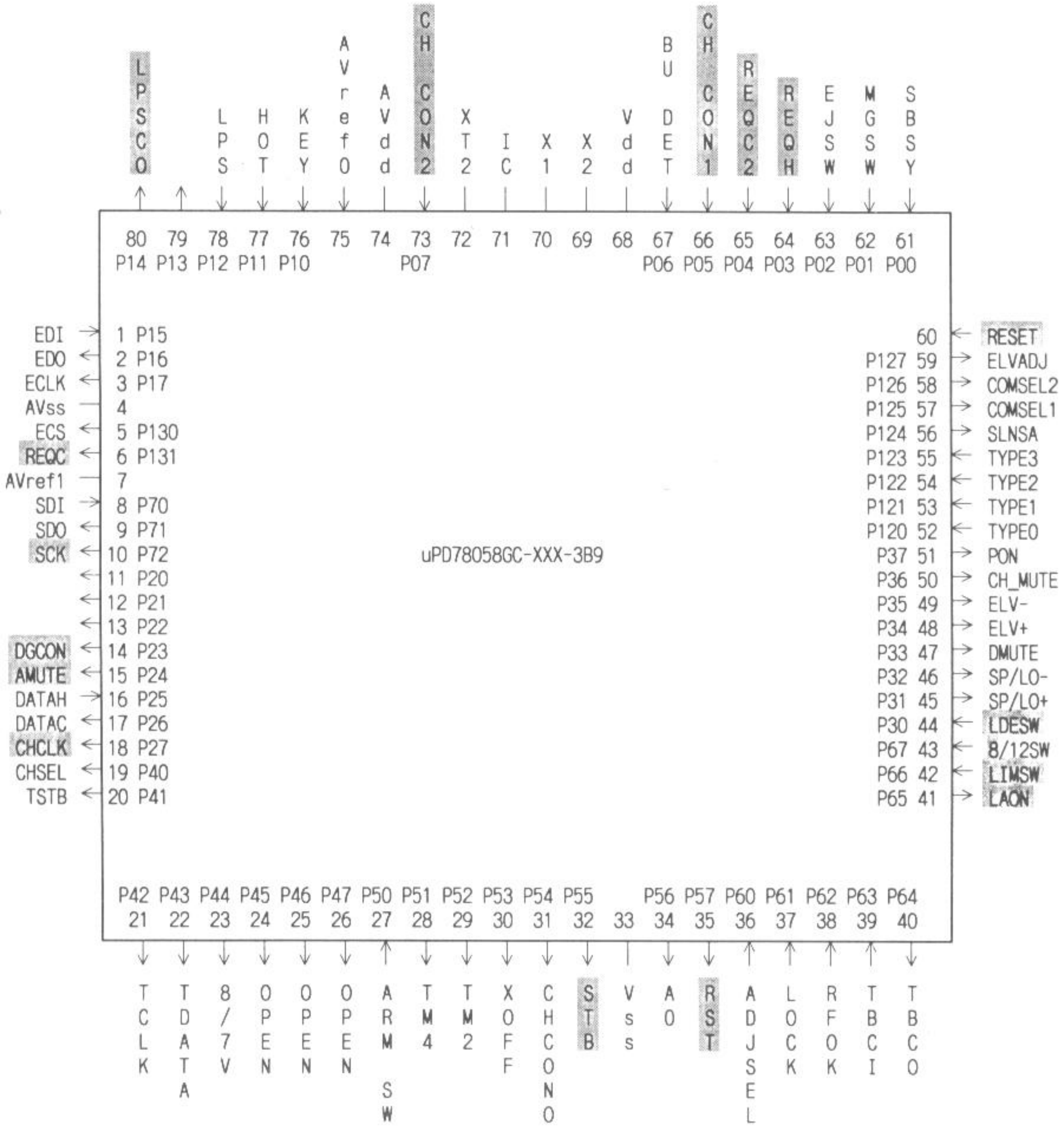
CD PLAYER UNIT(X32-4260-00)

Ref.No.	Prts No.	Use and Function	Operation and condition
IC1	PC2572A	RF amp & error amp	RF amplifier, focusing/tracking error amplifier, APC circuit, reference amplifier, mirror circuit, defect circuit, RF OK circuit, EFM comparator and vibration detector circuit.
IC2	PD63702	Digital servo data processor	Digital servo data processor, 8fs oversampling filter, D/A converter, digital loop filter.
IC3	NJM2100M	D/A converter output active filter	Differential amplifier.
IC5	TA78L05F	3-pin regulator	Supplies 5 V to the D/A converter and active filter.
IC6	UPD78058GC-450	System u-COM	
IC7	PST9137NR	Reset IC	
IC8	BA6791FP	Motor drive	Drives the focusing/tracking actuators, sled motor and spindle motor.
IC9	BA6287F	Motor drive	Drives the mechanism deck up-down motor.
IC10	M5278D05	3-pin regulator	5 V power supply for the servo circuitry.
IC11	AK93C45AF	Memory IC	Storage of data on the initial position of the mechanism deck up-down operation and on the distinction between 10-disc and 6-disc changer.
Q1	2SA1362(Y)	Laser control	Controls the laser current according to the voltage output from the IC1 LD terminal.
Q2	DTC124EK	Clock ON/OFF	Clock is turned OFF when the IC6 XOFF terminal outputs "H".
Q3,Q4	2SD2114K	Audio muting	Muting is turned ON when IC6 A.MUTE outputs "L".
Q5	DTA124EK	Audio muting	Muting is turned ON when IC6 A.MUTE outputs "L".
Q6	2SB1188	5 V optics power	Supplies the power from AVR 8 V to the A.VDD of the P-U, IC1 and IC2.
Q7	DTC124EK	H/U communication control	Inverts the CH-CON logic.
Q8	DTC124EK	Reset SW	The microcomputer is reset when CH-RST goes "H".
Q9	DTA114EK	LPS power SW	Goes ON when LPSCO of IC6 goes "L" at P-ON or during up-down operation.
Q10	2SA1362(Y)	P-ON SW	
Q11	DTA143EK	H/U communication control	Inverts the CH-MUTE logic.
Q12	2SA1362(Y)	Servo 5 V drive	
Q13	DTC124EK	Servo 5 V SW	Goes ON/OFF at P-ON.
Q14	DTC124EK	B-U power detect SW	
Q15	2SB1655(E,F)	8 V AVR drive	
Q16	2SC2412K	8 V AVR drive	
Q17	DTA143EK	8 V AVR SW	Turned ON/OFF by P-ON.
Q18	DTC124EK	8 V AVR SW	Turned ON/OFF by P-ON.
Q19	DTC124EK	AVR 8 V/7 V SW	7 V when "H" (normal play mode).8 V when "L" (mechanism loading-ejection operation, ELV).
Q20,Q21	DTC114YK	Focusing/tracking hold upon scratch detection	When a scratch is detected, holds the focusing error and tracking error signals at the reference.
Q22	2SC2412K	Scratch detect SW	

MICROCOMPUTER'S TERMINAL DESCRIPTION

(X32-) IC6: UPD78058GC-450

Terminal connection


uPD78058GC-XXX-3B9
80 P14 LPSCO
79 P13
78 P12 LPS
77 P11 HOT
76 P10 KEY
75 AVref0
74 AVdd
73 P07 CHCON2
72 XT2
71 IC
70 X1
69 X2
68 Vdd
67 P06 BUDET
66 P05 CHCON1
65 P04 REQC2
64 P03 REQH
63 P02 EJSW
62 P01 MGSW
61 P00 SBSY
EDI 1 P15
EDO 2 P16
ECLK 3 P17
AVss 4
ECS 5 P130
REQC 6 P131
AVref1 7
SDI 8 P70
SDO 9 P71
SCK 10 P72
11 P20
12 P21
13 P22
DGCON 14 P23
AMUTE 15 P24
DATAH 16 P25
DATAC 17 P26
CHCLK 18 P27
CHSEL 19 P40
TSTB 20 P41
60 RESET
P127 59 ELVADJ
P126 58 COMSEL2
P125 57 COMSEL1
P124 56 SLNSA
P123 55 TYPE3
P122 54 TYPE2
P121 53 TYPE1
P120 52 TYPE0
P37 51 PON
P36 50 CH_MUTE
P35 49 ELV-
P34 48 ELV+
P33 47 DMUTE
P32 46 SP/LO-
P31 45 SP/LO+
P30 44 LDESW
P67 43 8/12SW
P66 42 LIMSW
P65 41 LAON
P42 21 TCLK
P43 22 TDATA
P44 23 8/7V
P45 24 OPEN
P46 25 OPEN
P47 26 OPEN
P50 27 ARMSW
P51 28 TM4
P52 29 TM2
P53 30 XOFF
P54 31 CHCONO
P55 32 STB
33 Vss
P56 34 A0
P57 35 RST
P60 36 ADJSEL
P61 37 LOCK
P62 38 RFOK
P63 39 TBCI
P64 40 TBCO

MICROCOMPUTER'S TERMINAL DESCRIPTION

Terminal connection

Pin No.	Pin Name	I/O	Name	Pin Type	Function
1	P15	I	EDI	Push-pull	EEPROM data input.
2	P16	O	EDO	Buffer	EEPROM data output.
3	P17	O	ECLK	Buffer	EEPROM clock output.
4	AVss		AVss		
5	P130	O	ECS	Push-pull	EEPROM chip select output.
6	P131	O	REQC	Push-pull	Changer request output for 5-wire communication.
7	AVref1		AVref1		D/A converter reference voltage input
8	P70	I	SDI	Push-pull	Data input from servo IC.
9	P71	O	SDO	Buffe	Data output to servo IC.
10	P72	O	SCK	Push-pull	Clock output to servo IC.
11	P20	O		Push-pull	Not used (open).
12	P21	O		Push-pull	Not used (open).
13	P22	O		Push-pull	Not used (open).
14	P23	O	DGCON	Push-pull	Digital output control (not used)
15	P24	O	AMUTE	Push-pull	Audio muting output.
16	P25	I	DATAH	Schmitt trigger	H/U data input for 5-wire communication.
17	P26	O	DATAC	Push-pull	Changer data output for 5-wire communication.
18	P27	O	CHCLK	Push-pull	Changer clock output for 5-wire communication.
19	P40	O	CHSEL	Push-pull	Changer 1/2 switching.
20	P41	O	TSTB	Push-pull	Test mode strobe output.
21	P42	O	TCLK	Push-pull	Test mode clock output.
22	P43	O	TDATA	Push-pull	Test mode data output.
23	P44	O	8/7V	Push-pull	
24	P45	O		Push-pull	Not used.
25	P46	O		Push-pul	Not used.
26	P47	O		Push-pull	Not used.
27	P50	I	ARM_SW	Buffer	Arm SW input.
28	P51	O	TM4	Push-pull	4x-speed mode control output (not used).
29	P52	O	TM2	Push-pull	2x-speed mode control output (not used).
30	P53	O	XOFF	Push-pull	Servo IC oscillation OFF control output.
31	P54	O	CHCONO	Push-pull	CHCON output to stack changer.
32	P55	O	STB	Push-pull	Strobe output to servo IC.
33	Vss		Vss		Ground potential.
34	P56	O	A0	Push-pull	A0 output to servo IC.
35	P57	O	RST	Push-pull	Reset output to servo IC.
36	P60	I	ADJSEL	Buffer	Servo automatic adjustment invalidation selection terminal (for use in testing).
37	P61	I	LOCK	Buffer	Spindle servo lock detection.
38	P62	I	RFOK	Buffer	RF OK.
39	P63	I	TBCI	Buffer	Tracking filter bank switching input.
40	P64	O	TBCO	Push-pull	Tracking filter bank switching output.
41	P65	O	LAON	Push-pull	Laser ON.
42	P66	I	LIMSW	Push-pull	Limit switch input.
43	P67	I	8/12SW	Push-pull	8 cm/12 cm judgment switch (not used).

MICROCOMPUTER'S TERMINAL DESCRIPTION

Terminal connection

Pin No.	Pin Name	I/O	Name	Pin Type	Function
44	P30	I	LEDSW	Push-pull	Loading end switch input.
45	P31	O	SP/LO+	Push-pull	Spindle/loading motor output +.
46	P32	O	SP/LO-	Push-pull	Spindle/loading motor output -.
47	P33	O	DMUTE	Push-pull	Driver muting.
48	P34	O	ELV+	Push-pull	Up-down motor output +.
49	P35	O	ELV-	Push-pull	Up-down motor output -.
50	P36	O	CH_MUTE	Push-pull	Changer muting output.
51	P37	O	PON	Push-pull	P-ON output.
52	P120	I	TYPE0	Buffer	Test mode input 0.
53	P121	I	TYPE1	Buffer	Test mode input 1.
54	P122	I	TYPE2	Buffer	Test mode input 2.
55	P123	I	TYPE3	Buffer	Test mode input 3.
56	P124	O	SLNSA	Push-pull	Sled dead sector invalidation setting (for testing).
57	P125	I	COMSEL1	Buffer	u-COM destination type terminal 1.
58	P126	I	COMSEL2	Buffer	u-COM destination type terminal 2.
59	P127	I	ELVADJ	Buffer	Up-down position adjustment mode terminal.
60	$\overline{\text{RESET}}$		$\overline{\text{RESET}}$		
61	P00	I	SBSY	Schmitt trigger	Subcode Q input timing detection input.
62	P01	I	MGSW	Schmitt trigger	Magazine switch input.
63	P02	I	EJSW	Schmitt trigger	Eject switch input.
64	P03	I	REQH	Push-pull	REQH input.
65	P04	I	REQC2	Push-pull	CH2 REQC input.
66	P05	I	CH_CON1	Push-pull	CH1 control input from H/U.
67	P06	I	BU_DET	Push-pull	B-U detection.
68	Vdd		Vdd		Positive power supply.
69	X2		X2		Main clock (4.19 MHz) connection terminal 2.
70	X1		X1		Main clock (4.19 MHz) connection terminal 1.
71	IC		IC		Internally connected.
72	XT2		XT2		
73	XT1	I	CH_CON2		CH2 control input from H/U. (Stack changer)
74	AVdd		AVdd		Analog power supply of A/D converter.
75	AVref0		AVref0		Reference input voltage of A/D converter.
76	P10	I	KEY	A/D converter	Key input terminal (for test mode).
77	P11	I	HOT	A/D converter	High temperature detection terminal.
78	P12	I	LPS	A/D converter	Linear position sensor.
79	P13	O		A/D converter	
80	P14	O	LPSCO	A/D converterL	LPS power control.

MICROCOMPUTER'S TERMINAL DESCRIPTION

TEST Modes

E-88 test mode

●How to enter

While holding the magazine eject SW, reset the unit and keep on holding the eject SW for more second to enter the E-88 mode.

(Note) In the E-88 mode, the initial position detection operation at the time of reset start is not performed.

●Manual operation functions

The E-88 display appears when the H/U is set to the changer mode.

In this condition, the changer mechanism can be operated manually using the track search up/down and disc search up/down keys.

Track search Up key:	Operates the spindle/loading motor in the direction for pulling the disc tray into the mechanism deck (disc loading direction).
Track search Down key:	Operates the spindle/loading motor in the direction for returning the disc tray into the magazine (disc ejection direction).
Disc search Up key:	Operates the ELV motor in the direction for moving the mechanism deck upward.
Disc search Down key:	Operates the ELV motor in the direction for moving the mechanism deck downward.

●Position adjustment function

This function writes the mechanism position adjustment values in the EEPROM in the E-88 mode.

Adjustment procedure

1. With the mechanism in the magazine ejection condition, move the mechanism manually up and down to set the mechanism to the reference position.
2. Pressing the REP key of the H/U starts the judgment of the mechanism position and the distinction whether the changer is a 6-disc or 10-disc changer.
   If the mechanism position is extremely deviated from the reference position, the processing is aborted immediately.
3. The offset from the reference position is calculated and the 6/10 data and offset values are written in the EEPROM.
4. Data is read from the EEPROM to judge whether it has been written normally.
   When it is judged that the write operation has completed normally, the mechanism deck moves to the magazine ejection standby position.
   When it is judged that the write operation was abnormal, the mechanism performs no operation.

(Note) Mechanism reference position
6-disc mechanism: Position of the 3rd stage
10-disc mechanism: Position of the 6th stage

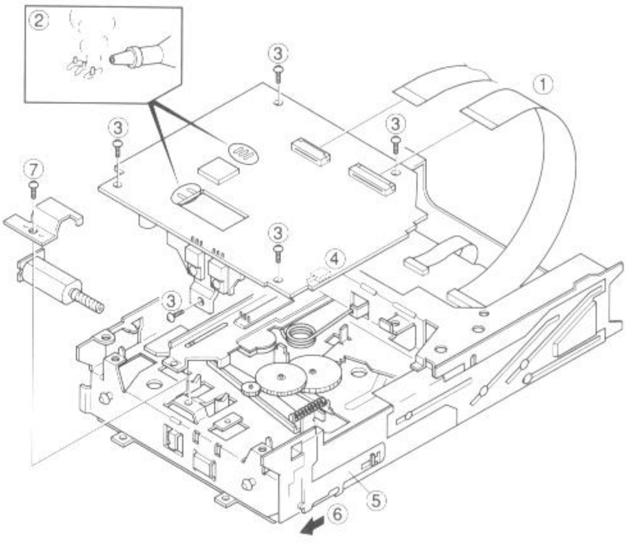
Mechanism Ass'y Disassembly Procedure

Overall

- Remove the 2 flexible cables. (①)
- Remove solder from 5 positions and free the Main board. (②)
- Remove the 5 screws (③) and take out the Main board.

  (Precaution in assembly)

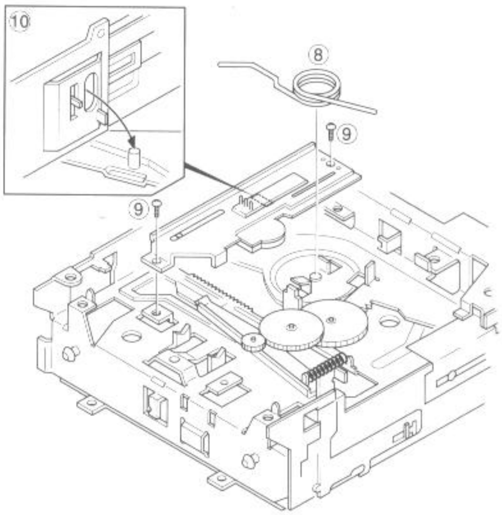
  When attaching the Main board, push the SW arm (⑤) outward so that the SW (④) does not hit the board. (⑥)
- Remove the screw (⑦) then remove the U-D (Up-Down) motor mounting hardware and the motor itself.



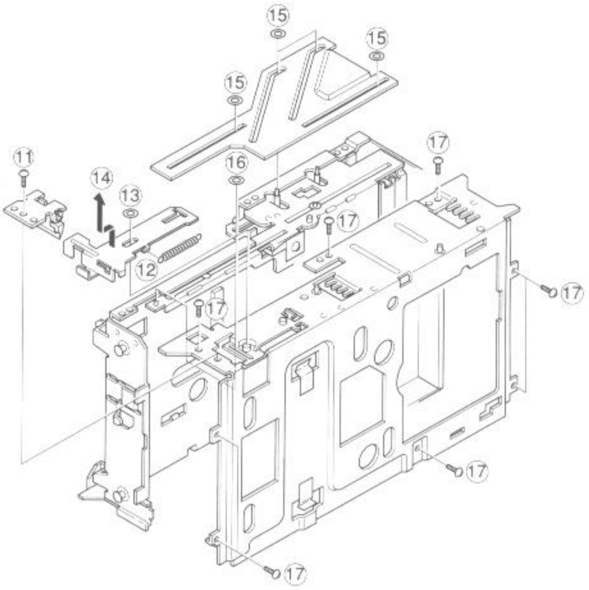
- Remove the U-D spring. (⑧)
- Remove the 2 screws (⑨) then remove the LPS ass'y.

  (Precaution in assembly)

  Attach the LPS ass'y by aligning and inserting the pin on the joint arm with the hollow section on the LPS ass'y. (⑩)

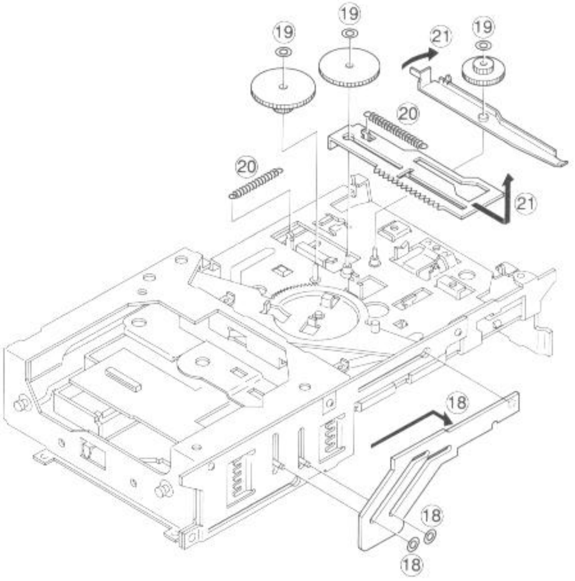


- Remove the screw (⑪) then remove the tray lock ass'y.
- Remove the spring (⑫) and the nylon washer (⑬) from the SW arm.
- Remove the hardware by sliding it while lifting one side. (⑭)
- Remove the 4 nylon washers (⑮) and remove the B (Back) slider.
- Remove the nylon washer (⑯) from the MD (Mechanism Deck).
- Remove the 8 screws (⑰) then remove chassis U (Up).



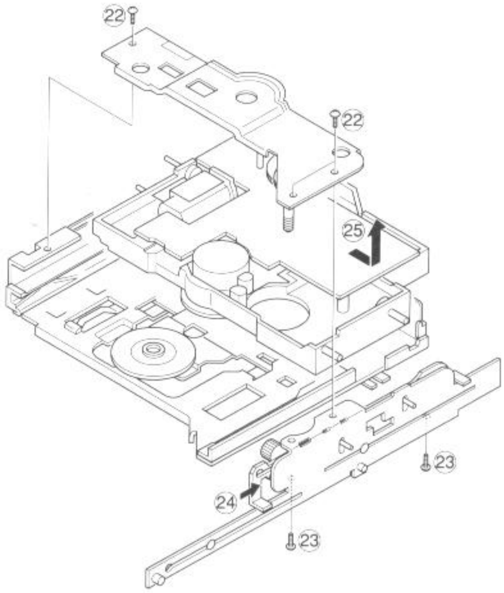
Mechanism Ass'y Disassembly Procedure

- Remove the 2 nylon washers (⑱).
- Remove the F (Front) slider after moving it to the left end. (⑱)
- Remove the 3 nylon washers and the 3 gears. (⑲)
- Remove the 2 springs (⑳).
- Remove the 2 levers by moving each of them to the position where it can be taken out. (㉑)



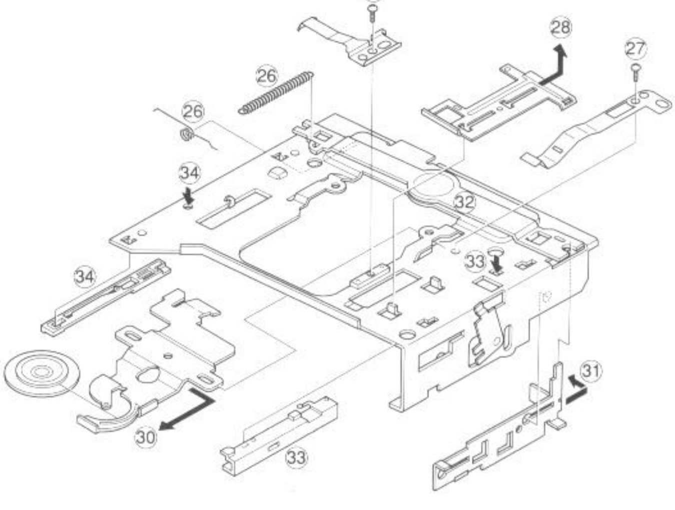
Mechanism deck

- Remove the 3 screws (㉒) then remove the clutch gear ass'y.
- Remove the 2 screws (㉓) from the rack gear ass'y.
- Move the rack gear to the extremity and remove the rack gear ass'y. (㉔)
- Remove the pickup ass'y. (㉕)



Clamper ass'y

- Remove the 2 springs (㉖).
- Remove the screw (㉗) then remove the cancel plate spring.
- Remove the cancel slider by moving it to the right end while lifting it slightly. (㉘)
- Remove the screw (㉙) and remove the clamper holder plate spring, clamper and clamper lever. (㉚)
- Remove cam F. (㉛)
- Remove the MD joint arm by rotating it counterclockwise while lifting it slightly. (㉜)
- Remove plastic guide A by moving it toward the left while lifting its stopper section slightly. (㉝)
- Remove plastic guide B by moving it toward the left while lifting its stopper section slightly. (㉞)



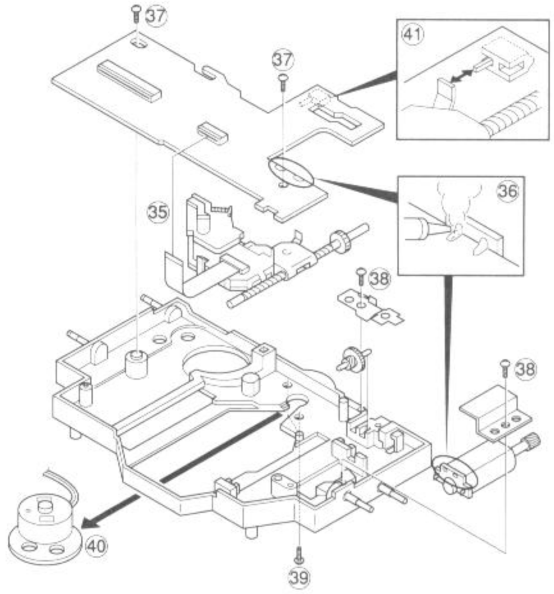
Mechanism Ass'y Disassembly Procedure

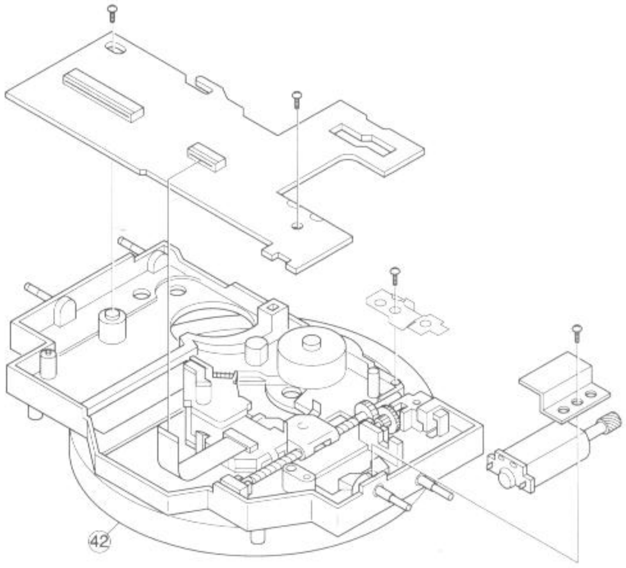
Pickup ass'y

- Remove the pickup flexible cable. (㉟)
- Remove solder from 2 positions. (㊱)
- Remove the 2 screws (㊲) then remove the PC board.
- Remove the 2 screws (㊳) then remove the motor, retaining hardware and pickup.
- Remove the 2 screws (㊴) then remove the motor. (㊵)

(Precautions in assembly)

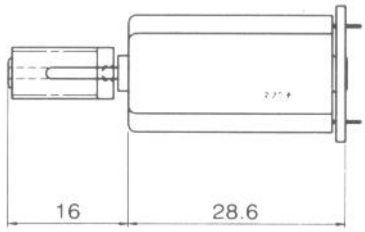
- When attaching the motor, place it so that the lead wire side comes outside and be careful in the styling of the lead wire so that it does not contact the gear.
- Before attaching the PC board, check that the pickup is not located at the innermost position so that the limit SW does not hit it. (㊶)
- When detaching or attaching the hardware and PC board retaining screws, place the ass'y on a loop of plastic tape reel, etc. (㊷) so that the turntable does not contact the work bench surface.



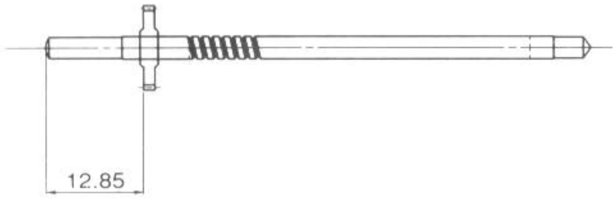


Gear attaching position

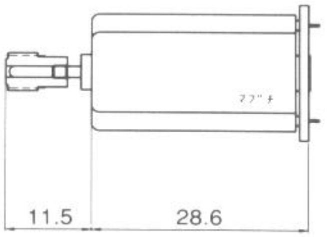
- The gears of the U-D motor, sled motor and screw gear ass'y should be attached as shown below. Be sure to observe the lengths indicated below when push-fitting these parts.



U-D motor



Screw gear ass'y

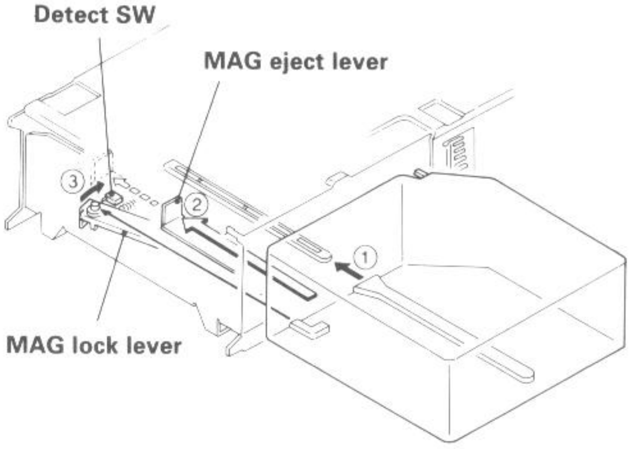


Sled motor

CD Changer Mechanism Operation Description

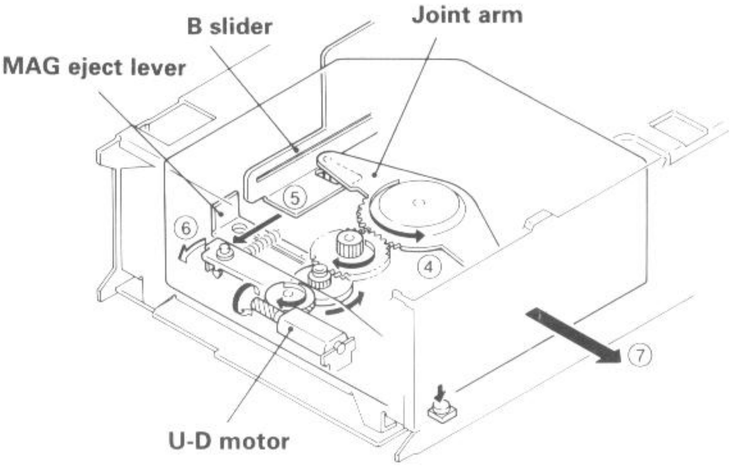
Magazine insertion

- Insert the magazine into the mechanism (①). The magazine moves toward the rear of the unit while pushing the MAG eject lever (②). When the magazine reaches the end position, the MAG lock lever rotates (③) to lock the magazine.
- The rotation of the MAG lock lever turns the magazine detect switch ON so the magazine insertion is recognized.


Detect SW
MAG eject lever
③
②
①
MAG lock lever

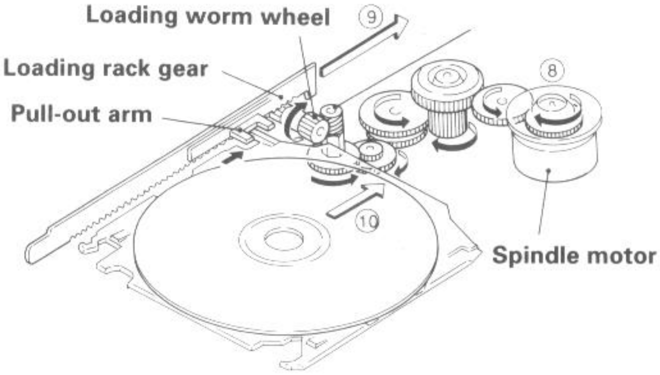
Magazine ejection

- When the magazine eject button is pressed, the magazine tray returns in the magazine, and the joint arm is rotated driven by the U-D motor (④). Then the B (Back) slider which is interlocked with the joint arm moves in the direction of the arrow (⑤) and pushes the MAG lock lever (⑥).
- When the MAG lock lever is pushed, the magazine is unlocked then ejected by the MAG eject lever and MAG eject spring (⑦).
  (During the above operation, the resistance of the linear position sensor controls the operating positions by voltage.)


B slider
Joint arm
MAG eject lever
⑤
⑥
④
⑦
U-D motor

Disc loading

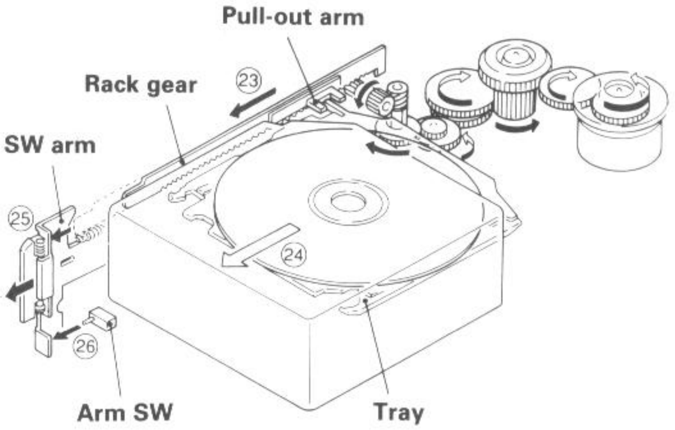
- When the disc loading command is received, the spindle motor starts rotation (⑧). This rotation is transmitted through the worm gear and worm wheel and activates the loading rack gear (⑨).
- The rack gear has a pull-out arm, which pulls the magazine out of the tray(⑩).


Loading worm wheel
⑨
Loading rack gear
⑧
Pull-out arm
⑩
Spindle motor

CD Changer Mechanism Operation Description

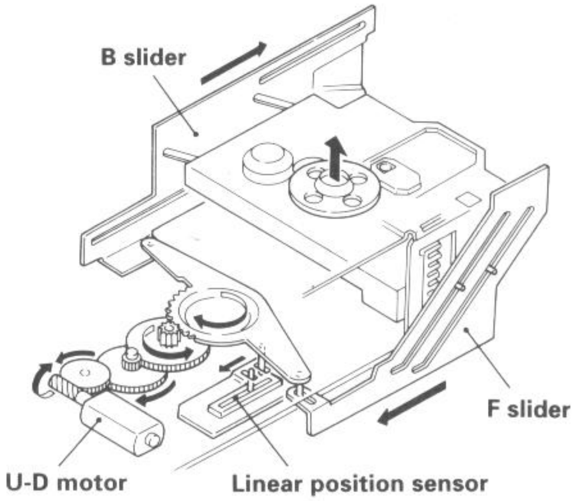
Disc ejection

- When unchucking has completed, cams F and R, the MD joint arm, clamp arm and rack gear move in the opposite directions to the directions during loading (㉓).
- The disc is moved into the magazine by the pull-out arm of the rack gear (㉔).
- When the tray including a disc comes inside the magazine, the extremity of the rack gear pushes the SW arm (㉕).
- The SW arm turns OFF the arm SW which detects the completion of ejection (㉖). Now the ejection has completed.


Pull-out arm
Rack gear
㉓
SW arm
㉕
㉔
㉖
Arm SW
Tray

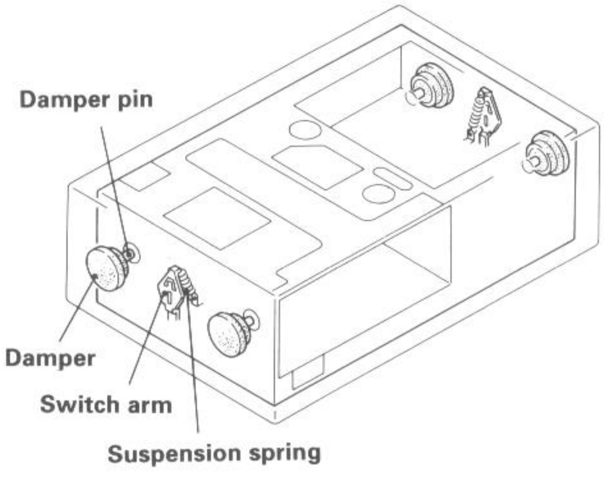
Stage detection (up/down movement)

- The stage containing the disc to be played is detected based on the value of the linear position sensor according to the up/down movement of MD that is caused by the operations of the F and B sliders under the U-D motor drive.


B slider
F slider
U-D motor
Linear position sensor

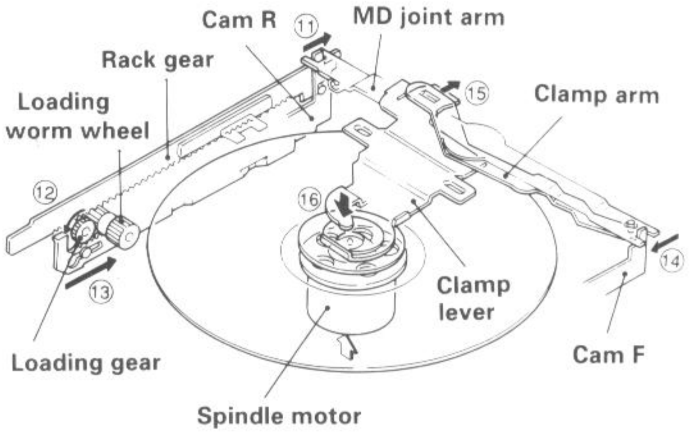
Mechanism floating

- The mechanism floating is provided as a vibration countermeasure and features the entire mechanism floating, which is different from the method adopted by the CHM-100 and 200 (previous KENWOOD mechanisms).
- The damper is inserted in the damper pin as shown below and fixed on the cabinet.
- The vertical, horizontal and 45-degree positioning can be switched by rotating the switch arm on the cabinet.
- The switch arm is connected with a suspension spring and the mechanism.


Damper pin
Damper
Switch arm
Suspension spring

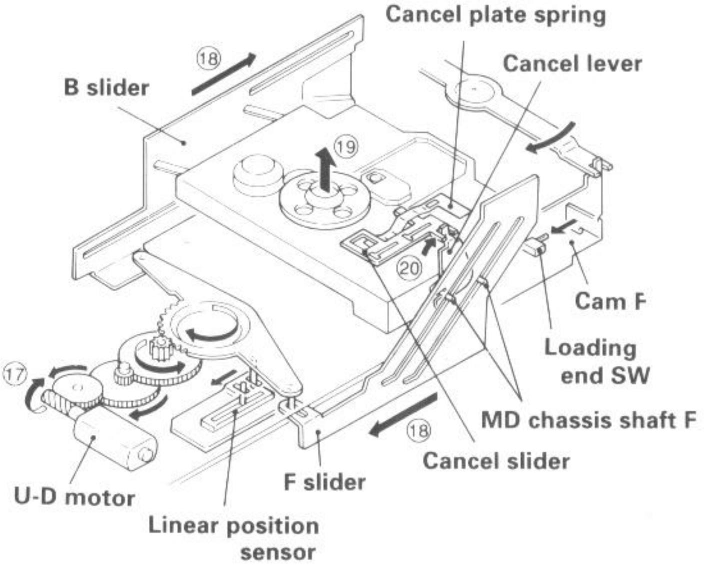
CD Changer Mechanism Operation Description

- When the rack gear approaches the end, it kicks cam R (⑪). This causes cam R to be engaged with the loading gear (⑫) so cam R slides together with the rack gear (⑬).
- As cam R is joined with the MD (Mechanism Deck) joint arm and cam F, they also start to move similarly (⑭).
- As the MD joint arm is joined with the clamp arm, it starts to rotate (⑮). This rotation moves the clamp lever down and initiates the chucking ready state (⑯).
- When cam F which is joined with cam R pushes the loading end SW, loading is completed and the spindle motor is stopped.


Cam R
⑪
MD joint arm
Rack gear
⑮
Clamp arm
Loading worm wheel
⑫
⑯
Clamp lever
⑭
⑬
Cam F
Loading gear
Spindle motor

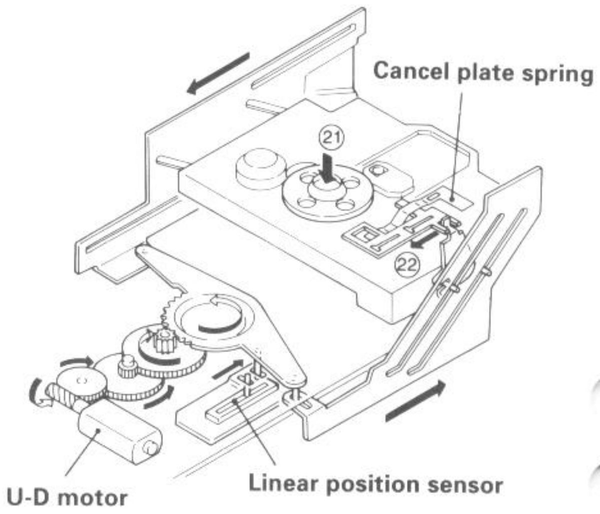
Disc chucking

- At the same time as the loading end SW turns ON, the lock of the MD chassis shown in the illustration is unlocked by cam R and cam F.
- MD chassis shafts F and R are joined with the F (Front) slider and B (Back) slider. After completion of loading, the U-D motor starts the drive (⑰) and moves the F and B sliders toward the chucking direction (⑱). This causes the MD chassis to move upward for chucking (⑲).
- During the above operation, the cancel lever joined with MD chassis shaft F activates the cancel slider (⑳) and lifts the cancel plate spring.
  (The cancel plate spring is provided to push the disc against the tray so that the disc does not drop during loading.)
- The position of the upward movement of the MD chassis is detected by the linear position sensor shown in the illustration.


Cancel plate spring
⑱
Cancel lever
B slider
⑲
⑳
Cam F
Loading end SW
⑰
MD chassis shaft F
⑱
Cancel slider
F slider
U-D motor
Linear position sensor

Unchucking

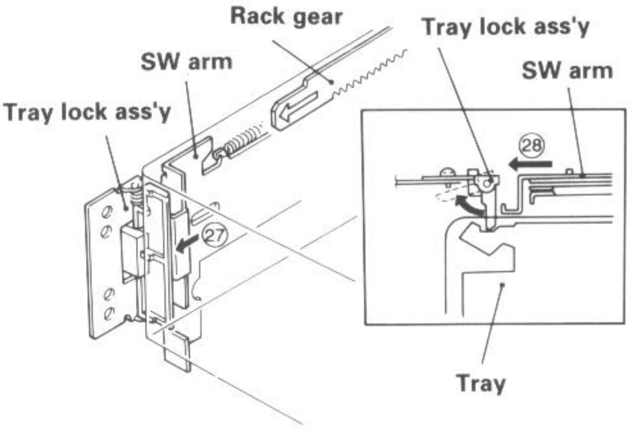
- When the unchucking command is received, the U-D motor starts the drive to move the F and B sliders and move the MD chassis downward (㉑).
- Unchucking completes when the MD chassis has moved down to the specified position. The cancel plate spring also moves in interlocking with the downward movement(㉒).
- The unchucking position is detected by the linear position sensor.


Cancel plate spring
㉑
㉒
U-D motor
Linear position sensor

CD Changer Mechanism Operation Description

Tray lock mechanism

- The tray lock ass'y shown in the illustration is used to prevent the jumping out of the magazine in case a shock is applied to the changer.
- The tray is locked by the SW arm which is interlocked with the rack gear operation (㉗).
- When the SW arm moves toward the loading direction, the arm of the lock ass'y rotates and locks the tray. The tray is unlocked when the SW arm moves toward the ejection direction (㉘).



Initial adjustment of the linear position sensor (LPS)

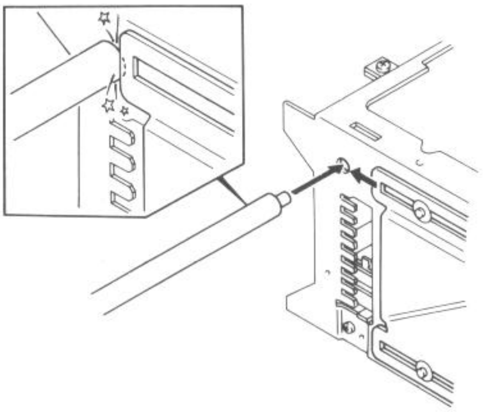
- With the mechanism of this unit, all of the operations associated with the movements of the F and B sliders, such as the stage detection, chucking position and ejection position are detected by the LPS.
- When the mechanism is in the initial state, after it has been disassembled or after its PC board has been replaced, the initial position of the LPS should be adjusted to eliminate the LPS variance as well as the mechanism variance.
- With the magazine set to the specified stage, the value indicated by the LPS is read. the position is detected by considering the error between the read value and the designed value.
- The values obtained in the adjustment are stored in the E2PROM, and the judgment between the 10-disc changer and 6-disc changer is made.
- When the PC board is new (when nothing is written in the E2PROM), the head unit (H/U) display shows "E-77".

LPS initial position adjustment procedure

Connect the changer to the H/U. While holding the magazine eject button of the changer, press the reset button of the H/U and, in about 1 second, release the magazine eject button. Press the CD button of the H/U to enter the E-88 mode. Move the mechanism deck to around the 1st stage by pressing the DISC- or DISC+ button.

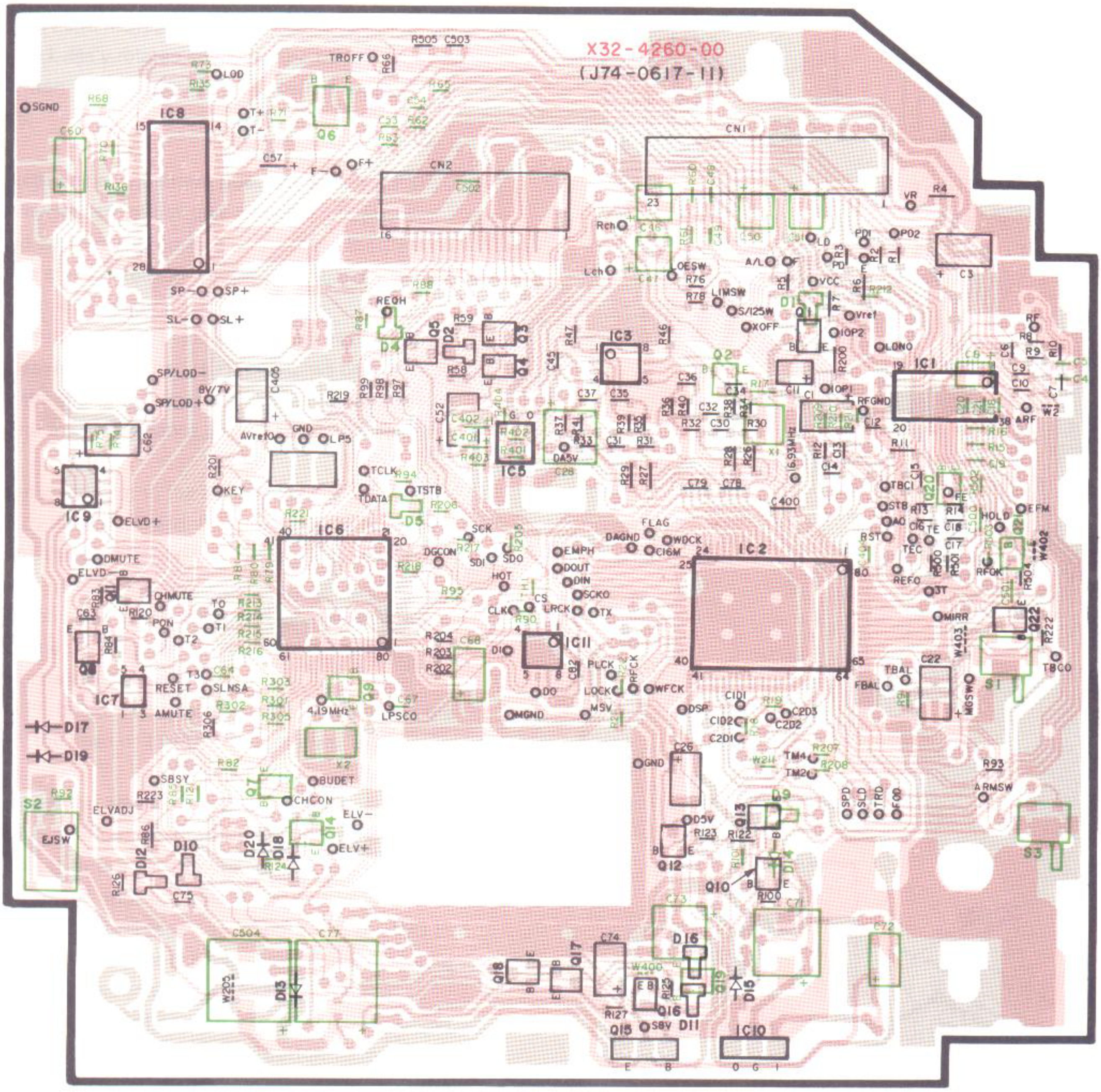
Insert the adjustment tool into the tool hole on the changer mechanism. Then press the DISC+ button to move the mechanism deck until the mechanism's slider hits the adjustment tool. When the motor locks (stops) press the REPEAT key of the H/U.

When the REPEAT key is pressed, the mechanism moves automatically to the 1st stage and the initial position adjustment completes. (The data is written in the E2PROM at this time.)



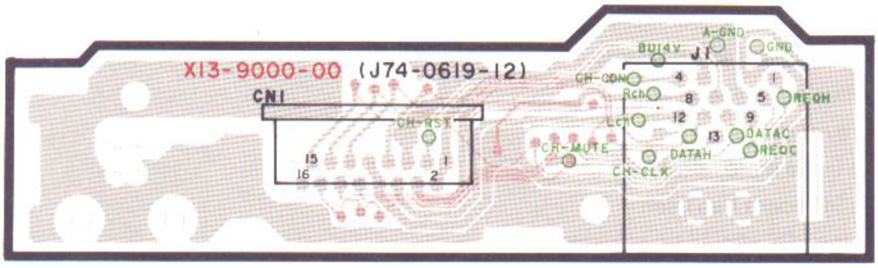
PC BOARD (COMPONENT SIDE VIEW)

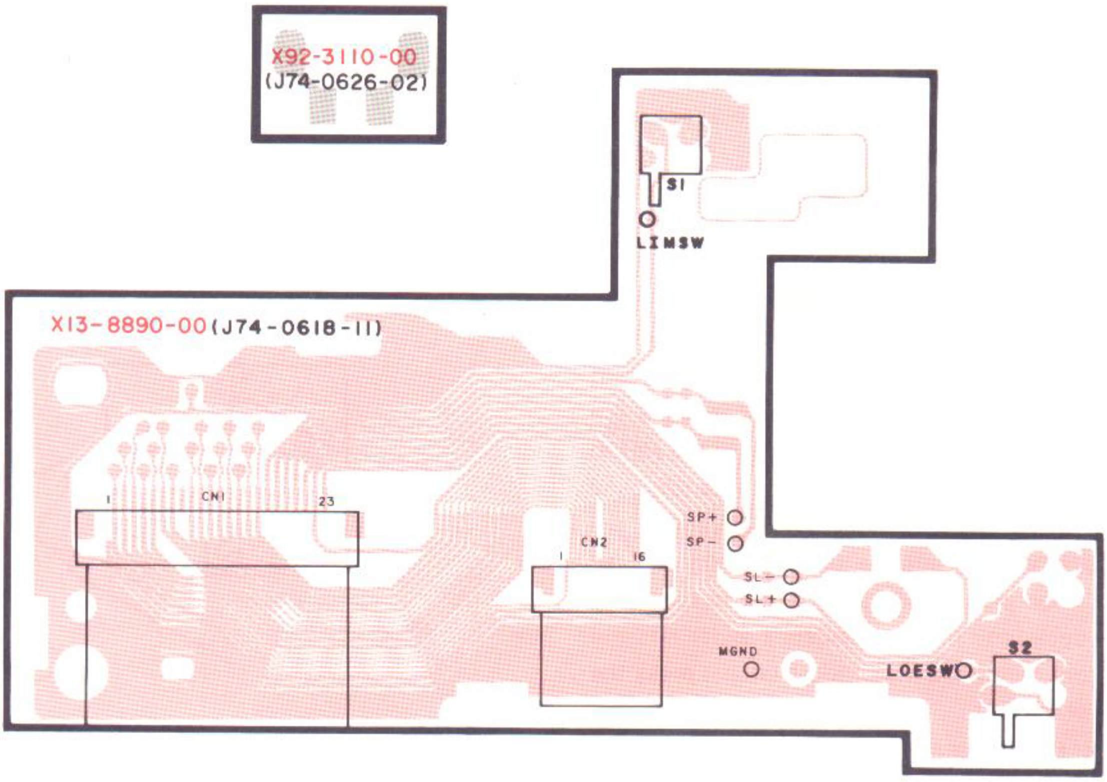
CD PLAYER UNIT (X32-4260-00)


X32-4260-00
(J74-0617-11)
IC1
IC2
IC3
IC5
IC6
IC7
IC8
IC9
IC10
IC11
CN1
CN2
S1
S2
S3
EJSW
D17
D19
SGND
LOD
T+
T-
F+
F-
TROFF
SP-
SP+
SL-
SL+
SP/LOD-
SP/LOD+
8V/7V
AVref
GND
LP5
KEY
ELVD+
DMUTE
ELVD-
CHMUTE
PON
TO
TI
T2
T3
RESET
SLNSA
AMUTE
SBSY
ELVADJ
CHCON
BUDET
ELV-
ELV+
4.19MHz
LPSCO
TCLK
TDATA
TSTB
REQH
SCK
DGCON
SDI
SDO
HOT
CLK
CS
LRCK
DI
DO
MGND
EMPH
DOUT
DIN
SCKO
TX
PLCK
LOCK
MSV
RFCK
WFCK
DAGND
FLAG
WDCK
C16M
DA5V
Rch
Lch
OESW
LIMSW
S/125W
XOFF
A/L
F
LD
PD
PDI
P02
VR
VCC
Vref
IOP2
LDNO
IOP1
RFGND
16.93MHz
ARF
TBCI
STB
A0
RST
TE
TEC
REFO
3T
FE
HOLD
EFM
RFOK
MIRR
TBAL
FBAL
MGSW
TBCO
DSP
CIDI
CID2
C2DI
C2D2
C2D3
TM4
TM2
ARMSW
D5V
SPD
SLD
TRD
FOO
S8V

Ref No.	IC1	IC2	IC3	IC5	IC6	IC7	IC8	IC9	IC10	IC11
Adress	3D	4D	3C	4C	4B	5A	A3	4A	6D	4C

Ref No.	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22
Adress	3D	3D	3C	4C	3B	2B	5B	4A	5B	5D	4A	5C	5D	5B	6C	6C	6C	6C	6C	4D	4E	4E


X13-9000-00 (J74-0619-12)
CN1
CH-RST
15
16
1
2
CH-MUTE
CH-CLK
CH-CON
Rch
Lch
BU14V
J1
A-GND
GND
4
1
8
5
REQH
12
9
13
DATAC
DATAH
REQC

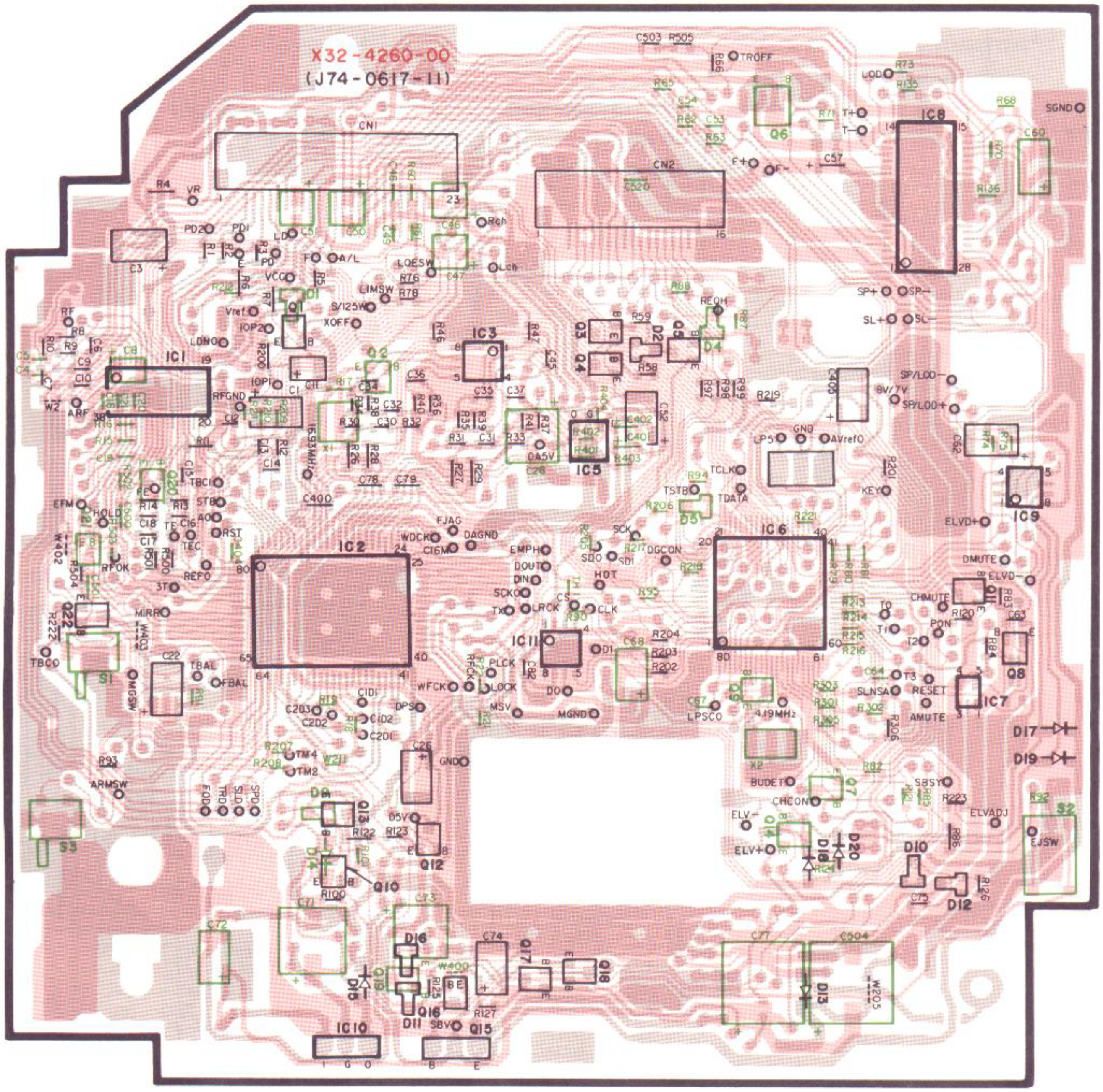

X92-3110-00
(J74-0626-02)
S1
LIMSW
X13-8890-00 (J74-0618-11)
1
CN1
23
CN2
1
16
SP+
SP−
SL−
SL+
MGND
LOESW
S2

PC BOARD (FOIL SIDE VIEW)

Re
Ac

Re
Ac

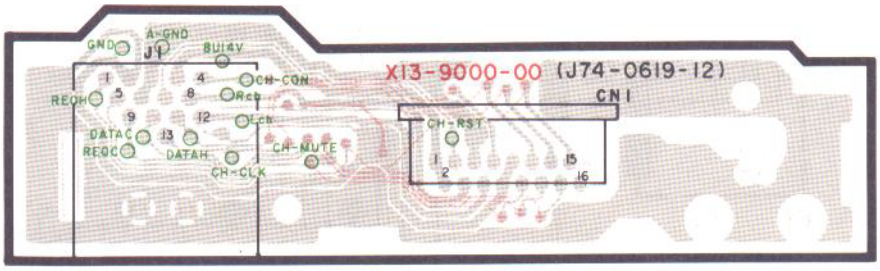
CD PLAYER UNIT (X32-4260-00)

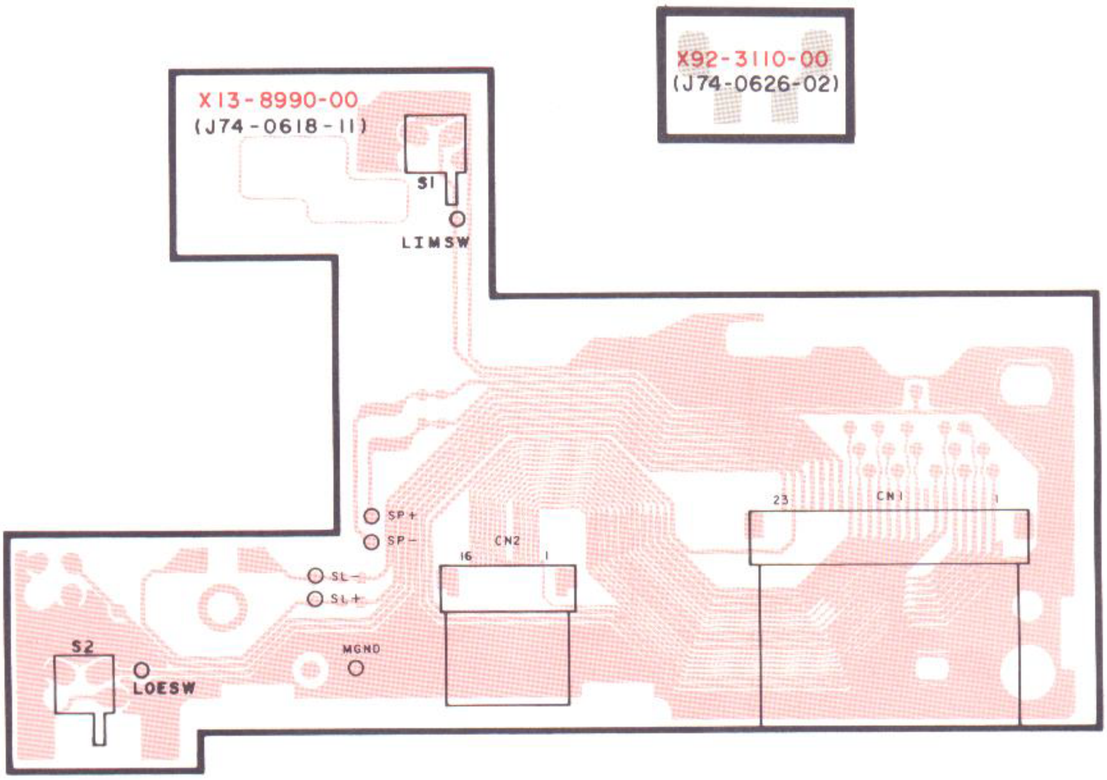

X32-4260-00
(J74-0617-11)
CN1
CN2
IC1
IC2
IC3
IC5
IC6
IC7
IC8
IC9
IC10
IC11
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
Q10
Q12
Q13
Q14
Q15
Q16
Q17
Q18
Q19
Q20
Q21
Q22
D1
D2
D4
D5
D10
D11
D12
D13
D14
D15
D16
D17
D18
D19
D20
S1
S2
S3
X1
X2
16.93MHz
4.19MHz
C3
C8
C22
C26
C28
C47
C48
C50
C51
C57
C60
C62
C63
C71
C72
C73
C74
C75
C77
C400
C401
C402
C405
C503
C504
C520
R4
R68
R73
R136
VR
PD1
PD2
PD
LD
F
A/L
LDESW
LIMSW
S/125W
XOFF
VCC
Vref
IOP
IOP2
LDNO
RFGND
RF
WZ
ARF
EFM
HOLD
RFOK
REFO
MIRR
TBCO
TBAL
FBAL
MDSW
ARMSW
FOD
TRD
SLD
SPD
TE
TEC
FE
TBC
STB
AO
RST
FJAG
WDCK
DAGND
C16M
EMPH
DOUT
DIN
SCKO
TX
LRCK
CS
CLK
SDO
SDI
SCK
OGCON
HOT
PLCK
RFCK
WFCK
LOCK
MSV
MGND
DO
DPS
C1D1
C1D2
C2D1
C2D2
C203
TM4
TM2
GND
D5V
S8V
DA5V
TCLK
TSTB
TDATA
LPS
AVref0
KEY
TROFF
LOD
SGND
T+
T−
F+
F−
Rch
Lch
SP+
SP−
SL+
SL−
SP/LOD−
SP/LOD+
8V/7V
ELVD+
ELVD−
DMUTE
CHMUTE
PON
RESET
AMUTE
SLNSA
T0
T1
T2
T3
LPSCO
BUDET
CHCON
ELV−
ELV+
SBSY
ELVADJ
EJSW
W205
W400
W402
W403
W211

1
2
3
4
5
6
7

No.	IC1	IC2	IC3	IC5	IC6	IC7	IC8	IC9	IC10	IC11
ess	3K	4L	3M	4M	4N	5O	3N	4O	6L	4O

No.	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22
ess	3L	3L	3M	3M	3M	2N	5N	5O	5N	5L	4O	5L	5L	5N	6M	6L	6M	6M	6L	4K	4K	4K

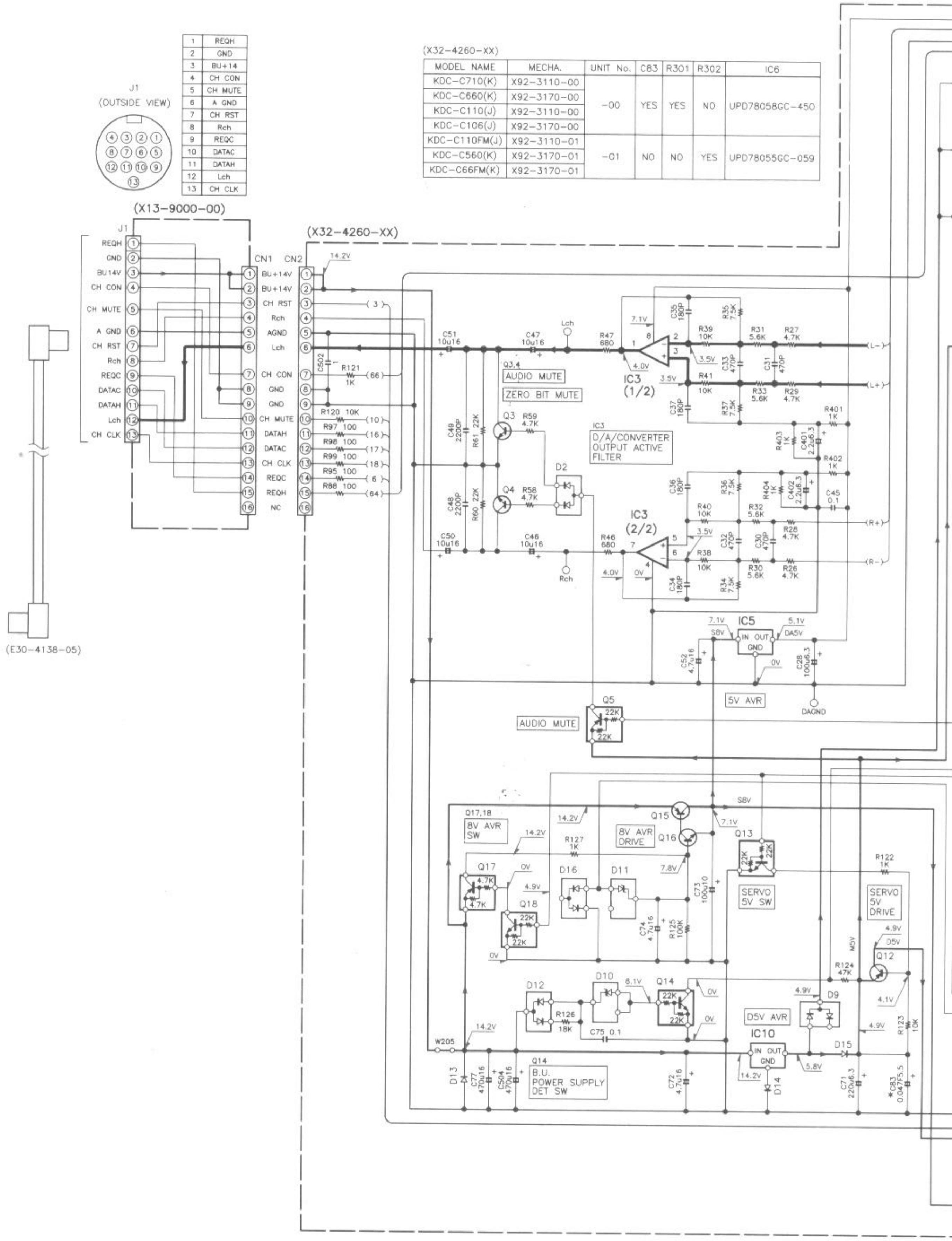

X13-9000-00 (J74-0619-12)
GND
A-GND
J1
BU14V
1
4
5
8
9
12
13
CH-CON
Rch
Lch
REQH
DATAC
REQC
DATAH
CH-CLK
CH-MUTE
CN1
CH-RST
1
2
15
16


X92-3110-00
(J74-0626-02)
X13-8990-00
(J74-0618-11)
S1
LIMSW
SP+
SP−
CN2
16
1
SL−
SL+
CN1
23
1
MGND
S2
LOESW

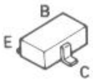
1	REQH
2	GND
3	BU+14
4	CH CON
5	CH MUTE
6	A GND
7	CH RST
8	Rch
9	REQC
10	DATAC
11	DATAH
12	Lch
13	CH CLK

(X32-4260-XX)

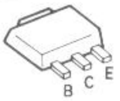
MODEL NAME	MECHA.	UNIT No.	C83	R301	R302	IC6
KDC-C710(K)	X92-3110-00	-00	YES	YES	NO	UPD78058GC-450
KDC-C660(K)	X92-3170-00					
KDC-C110(J)	X92-3110-00					
KDC-C106(J)	X92-3170-00					
KDC-C110FM(J)	X92-3110-01	-01	NO	NO	YES	UPD78055GC-059
KDC-C560(K)	X92-3170-01					
KDC-C66FM(K)	X92-3170-01					


A
B
C
D
E
1
2
3
4
5
6
7
J1
(OUTSIDE VIEW)
(X13-9000-00)
J1
REQH
GND
BU14V
CH CON
CH MUTE
A GND
CH RST
Rch
REQC
DATAC
DATAH
Lch
CH CLK
(E30-4138-05)
CN1
CN2
(X32-4260-XX)
BU+14V
BU+14V
CH RST
Rch
AGND
Lch
CH CON
GND
GND
CH MUTE
DATAH
DATAC
CH CLK
REQC
REQH
NC
14.2V
C502
R121 1K
R120 10K
R97 100
R98 100
R99 100
R95 100
R88 100
C51 10u16
C47 10u16
Lch
Q3,4
AUDIO MUTE
ZERO BIT MUTE
R47 680
IC3 (1/2)
IC3 (2/2)
IC3 D/A/CONVERTER OUTPUT ACTIVE FILTER
C49 2200P
R61 22K
Q3
R59 4.7K
D2
C48 2200P
R60 22K
Q4
R58 4.7K
C50 10u16
C46 10u16
R46 680
Rch
C35 180P
R39 10K
R35 7.5K
R31 5.6K
R27 4.7K
C33 470P
C31 470P
R41 10K
R33 5.6K
R29 4.7K
C37 180P
R37 7.5K
R401 1K
R403 1K
C401 2.2u6.3
R402 1K
C36 180P
R36 7.5K
R404 1K
C402 2.2u6.3
C45 0.1
R40 10K
R32 5.6K
R28 4.7K
C32 470P
C30 470P
R38 10K
R30 5.6K
R26 4.7K
C34 180P
R34 7.5K
(L-)
(L+)
(R+)
(R-)
7.1V
4.0V
3.5V
0V
IC5
S8V
DA5V
5.1V
C52 4.7u16
C28 100u6.3
5V AVR
DAGND
Q5
22K
AUDIO MUTE
S8V
Q15
Q16
7.1V
7.8V
Q17,18
8V AVR SW
8V AVR DRIVE
R127 1K
Q17
4.7K
Q18
D16
D11
C73 100u10
C74 4.7u16
R125 100K
Q13
SERVO 5V SW
R122 1K
SERVO 5V DRIVE
M5V
D5V
Q12
R124 47K
R123 10K
D12
D10
R126 18K
C75 0.1
Q14
D9
D5V AVR
IC10
IN OUT GND
D15
W205
D13
C77 470u16
C504 470u16
Q14 B.U. POWER SUPPLY DET SW
C72 4.7u16
D14
C71 220u6.3
*C83 0.047F5.5
14.2V
4.9V
4.1V
5.8V
8.1V

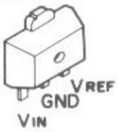
DTA114EK
DTA124EK
DTA143EK
DTC114YK
DTC124EK
2SA1362
2SC2412K
2SD2114K



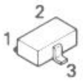
2SB1188



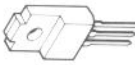
TA78L05F

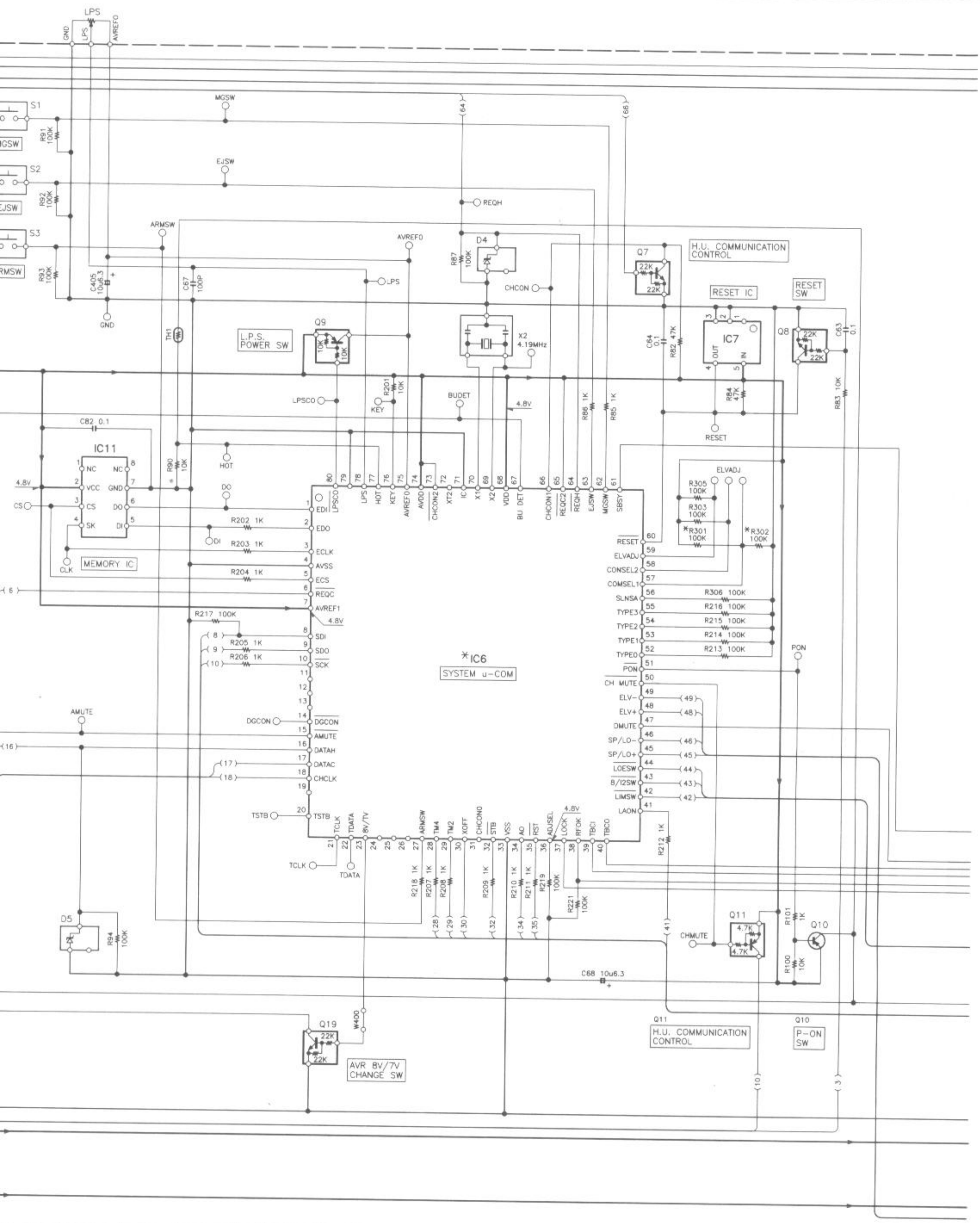

VREF
GND
VIN

DA204K

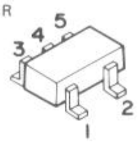


M5278D05

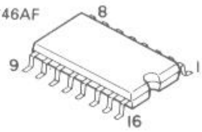


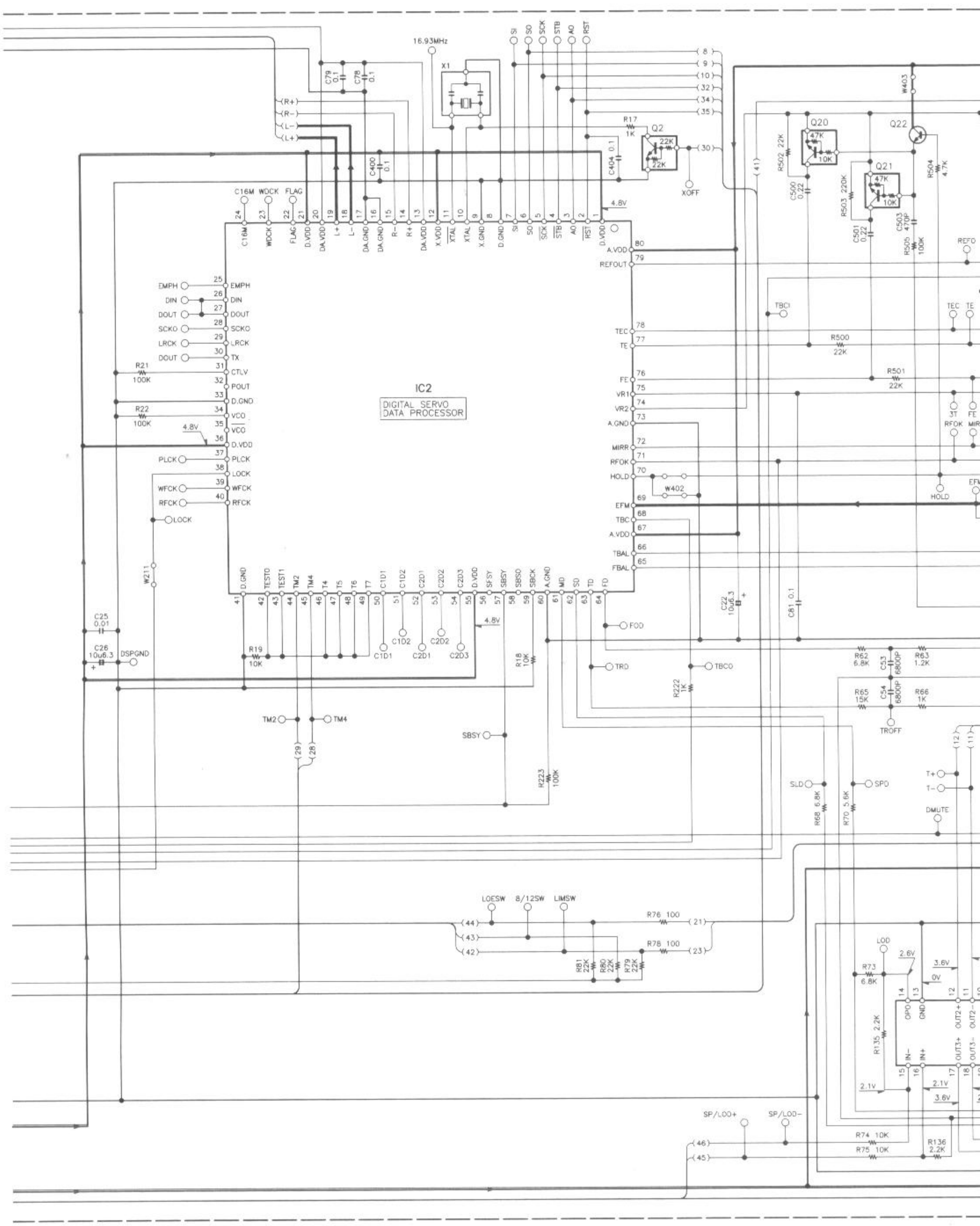

LPS
GND
LPS
AVREFO
S1
MGSW
R91 100K
S2
EJSW
R92 100K
S3
ARMSW
R93 100K
C405 10u6.3
GND
ARMSW
C67 100P
TH1
REQH
AVREFO
D4
R87 100K
LPS
CHCON
Q7
22K
22K
H.U. COMMUNICATION CONTROL
RESET IC
RESET SW
Q9
10K
10K
L.P.S. POWER SW
X2 4.19MHz
C64 0.1
R82 47K
IC7
OUT
IN
Q8
22K
22K
C63 0.1
LPSCO
R201 10K
KEY
BUDET
4.8V
R86 1K
R85 1K
R84 47K
RESET
R83 10K
C82 0.1
IC11
NC
VCC
CS
SK
NC
GND
DO
DI
R90 10K
HOT
4.8V
CS
DO
DI
CLK
MEMORY IC
R202 1K
R203 1K
R204 1K
ELVADJ
R305 100K
R303 100K
*R301 100K
*R302 100K
EDI
EDO
ECLK
AVSS
ECS
REQC
AVREF1
4.8V
LPSCO
LPS
HOT
KEY
AVREFO
AVDD
CHCON2
XT2
IC
X1
X2
VDD
BU DET
CHCON1
REQC2
REQH
EJSW
MGSW
SBSY
RESET
ELVADJ
CONSEL2
COMSEL1
SLNSA
TYPE3
TYPE2
TYPE1
TYPE0
PON
CH MUTE
ELV-
ELV+
DMUTE
SP/LO-
SP/LO+
LOESW
8/12SW
LIMSW
LAON
R306 100K
R216 100K
R215 100K
R214 100K
R213 100K
PON
R217 100K
R205 1K
R206 1K
SDI
SDO
SCK
*IC6
SYSTEM u-COM
AMUTE
DGCON
DGCON
AMUTE
DATAH
DATAC
CHCLK
TSTB
TSTB
TCLK
TDATA
8V/7V
ARMSW
TM4
TM2
XOFF
CHCONO
STB
VSS
AO
RST
ADJSEL
LOCK
4.8V
RFOK
TBCI
TBCO
TCLK
TDATA
R212 1K
R218 1K
R207 1K
R208 1K
R209 1K
R210 1K
R211 1K
R219 100K
R221 100K
D5
R94 100K
Q11
4.7K
4.7K
CHMUTE
R101 1K
Q10
R100 10K
C68 10u6.3
Q19
22K
22K
W400
AVR 8V/7V CHANGE SW
Q11
H.U. COMMUNICATION CONTROL
Q10
P-ON SW

PST9137NR



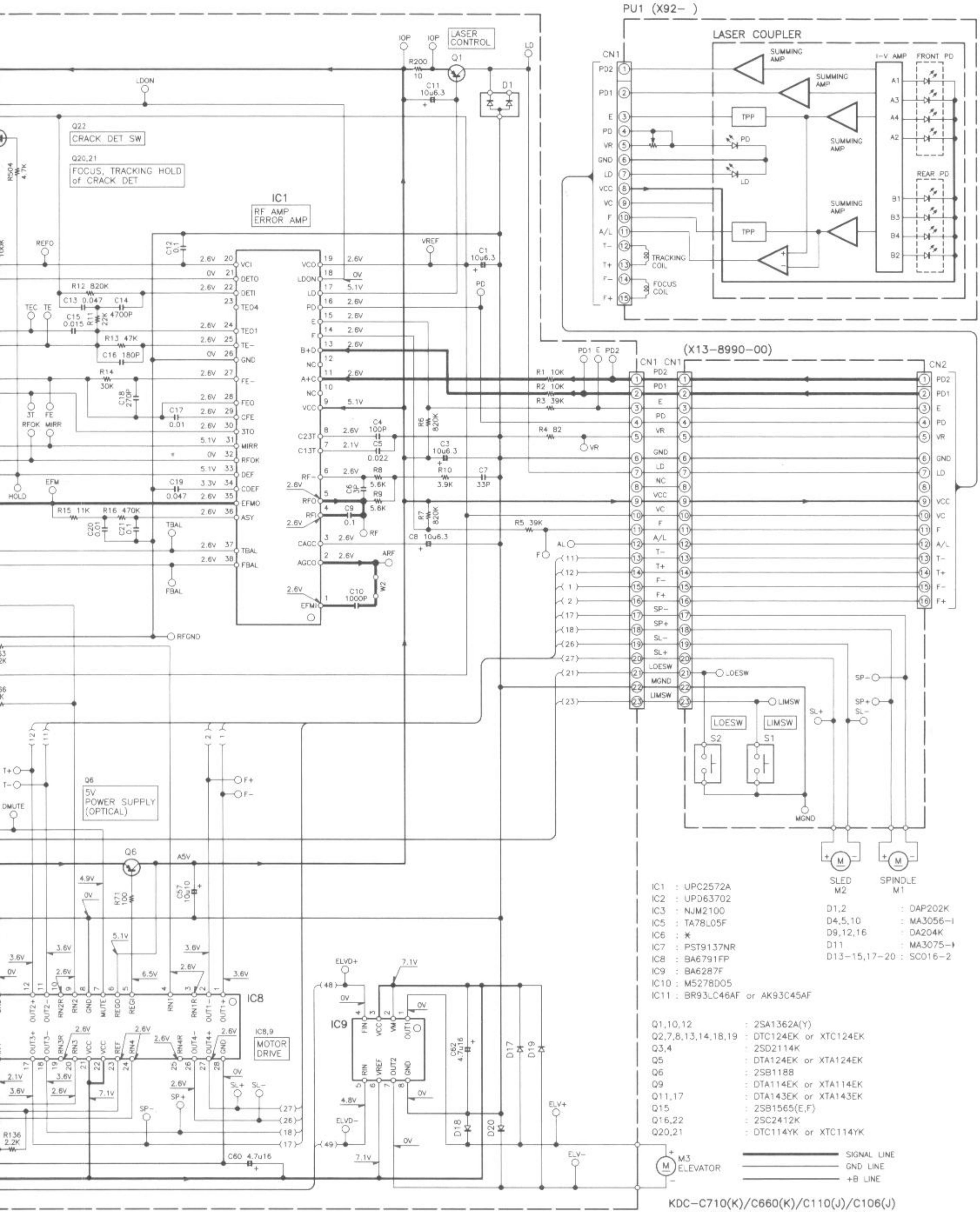
BR93LC46AF




IC2
DIGITAL SERVO
DATA PROCESSOR
16.93MHz
X1
SI
SO
SCK
STB
AO
RST
C79 0.1
C78 0.1
C400 0.1
C404 0.1
R17 1K
Q2
22K
XOFF
C16M
WDCK
FLAG
4.8V
EMPH
DIN
DOUT
SCKO
LRCK
R21 100K
R22 100K
PLCK
WFCK
RFCK
LOCK
W211
C25 0.01
C26 10u6.3
DSPGND
R19 10K
C1D1
C1D2
C2D1
C2D2
C2D3
R18 10K
TM2
TM4
SBSY
R223 100K
FOD
TRD
TBCO
R222 1K
C22 10u6.3
C81 0.1
A.VDD
REFOUT
TEC
TE
FE
VR1
VR2
A.GND
MIRR
RFOK
HOLD
W402
EFM
TBC
TBAL
FBAL
W403
Q20
47K
10K
Q21
Q22
R502 22K
R503 220K
R504 4.7K
R505 100K
C500 0.22
C501 0.22
C503 470P
REFO
TBCI
R500 22K
R501 22K
3T
RFOK
HOLD
R62 6.8K
C53 6800P
R63 1.2K
R65 15K
C54 6800P
R66 1K
TROFF
T+
T-
DMUTE
SLD
SPD
R68 6.8K
R70 5.6K
LOESW
8/12SW
LIMSW
R76 100
R78 100
R81 22K
R80 22K
R79 22K
LOD
R73 6.8K
2.6V
3.6V
0V
R135 2.2K
2.1V
OPO
GND
OUT2+
OUT2-
OUT3+
OUT3-
IN-
IN+
SP/LOD+
SP/LOD-
R74 10K
R75 10K
R136 2.2K

DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

CAUTION : For continued safety, replace safety critical comp
nents only with manufacturer's recommended parts (refer
parts list). ⚠ indicates safety critical components. For conti
ued protection against risk of fire, replace only with same ty


PU1 (X92-)
LASER COUPLER
SUMMING AMP
I-V AMP
FRONT PD
REAR PD
TPP
TRACKING COIL
FOCUS COIL
CN1
CN2
(X13-8990-00)
LASER CONTROL
Q1
D1
R200 10
C11 10u6.3
IOP
LD
LDON
Q22
CRACK DET SW
Q20,21
FOCUS, TRACKING HOLD of CRACK DET
IC1
RF AMP ERROR AMP
VREF
REFO
TEC
TE
3T
FE
RFOK
MIRR
HOLD
EFM
TBAL
FBAL
RFGND
ARF
RF
PD
VR
AL
F
LOESW
LIMSW
S1
S2
MGND
SL+
SL-
SP+
SP-
SLED M2
SPINDLE M1
Q6
5V POWER SUPPLY (OPTICAL)
A5V
DMUTE
T+
T-
F+
F-
IC8
IC8,9 MOTOR DRIVE
IC9
ELVD+
ELVD-
ELV+
ELV-
D17
D18
D19
D20
C62 4.7u16
C60 4.7u16
R136 2.2K
M3 ELEVATOR

IC1 : UPC2572A
IC2 : UPD63702
IC3 : NJM2100
IC5 : TA78L05F
IC6 : *
IC7 : PST9137NR
IC8 : BA6791FP
IC9 : BA6287F
IC10 : M5278D05
IC11 : BR93LC46AF or AK93C45AF

D1,2 : DAP202K
D4,5,10 : MA3056-
D9,12,16 : DA204K
D11 : MA3075-
D13-15,17-20 : SC016-2

Q1,10,12 : 2SA1362A(Y)
Q2,7,8,13,14,18,19 : DTC124EK or XTC124EK
Q3,4 : 2SD2114K
Q5 : DTA124EK or XTA124EK
Q6 : 2SB1188
Q9 : DTA114EK or XTA114EK
Q11,17 : DTA143EK or XTA143EK
Q15 : 2SB1565(E,F)
Q16,22 : 2SC2412K
Q20,21 : DTC114YK or XTC114YK

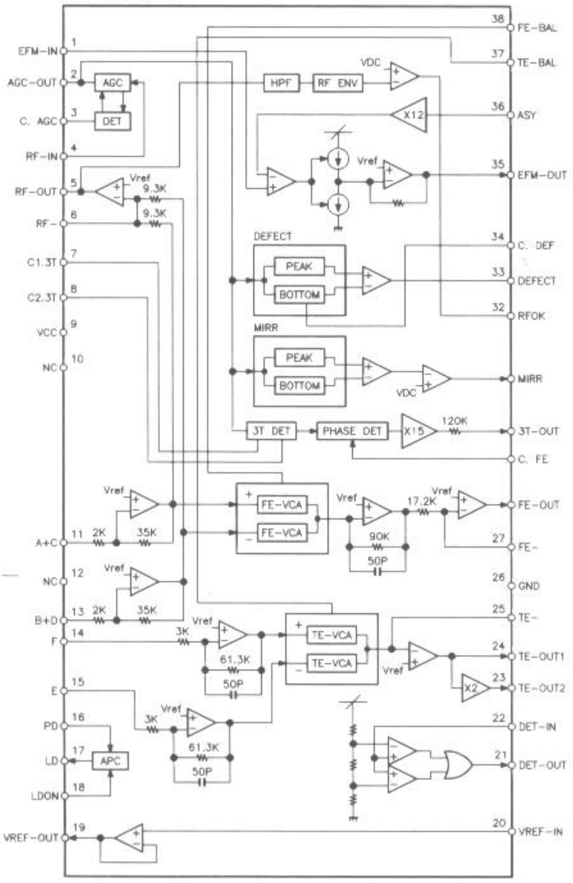
SIGNAL LINE
GND LINE
+B LINE

KDC-C710(K)/C660(K)/C110(J)/C106(J)
KDC-C560(K)/C66FM(K)/C110FM(J)

ical compo-
rts (refer to
For contin-
same type

and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

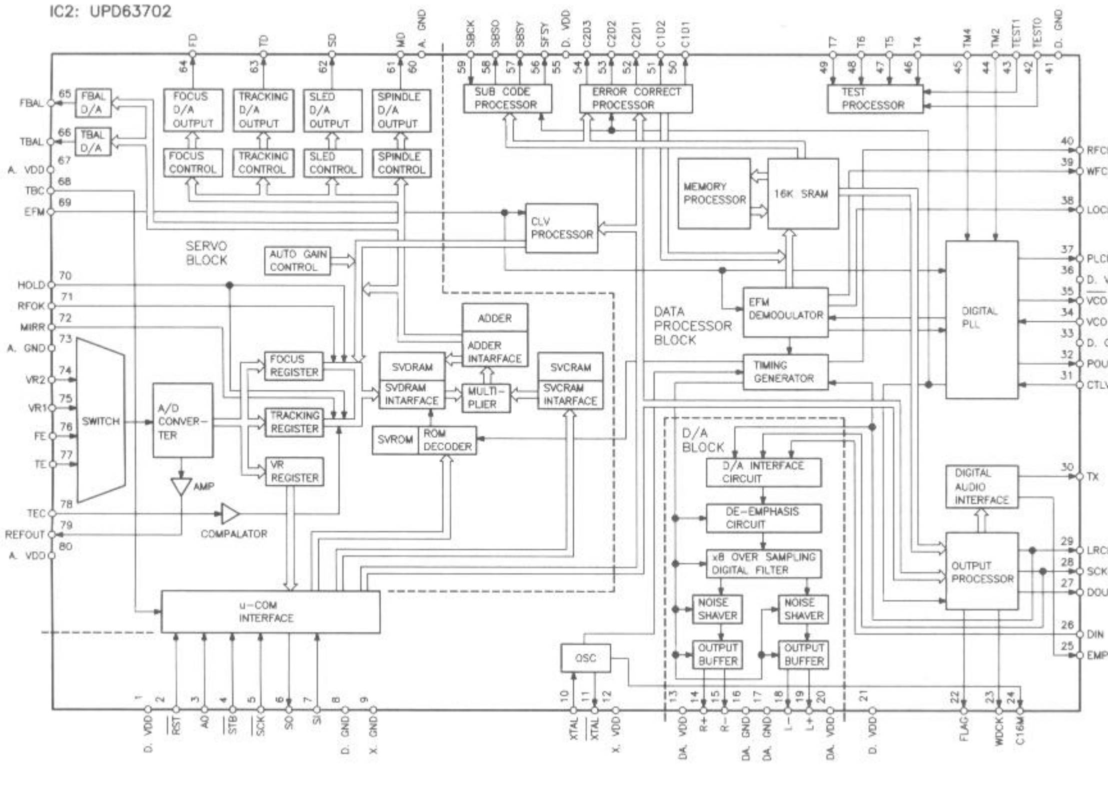
IC1: UPC2572A


EFM-IN
AGC-OUT
C. AGC
RF-IN
RF-OUT
RF-
C1.3T
C2.3T
VCC
NC
A+C
NC
B+D
F
E
PD
LD
LDON
VREF-OUT
AGC
DET
HPF
RF ENV
VDC
X12
Vref
9.3K
9.3K
DEFECT
PEAK
BOTTOM
MIRR
PEAK
BOTTOM
VDC
3T DET
PHASE DET
X15
120K
FE-VCA
FE-VCA
17.2K
90K
50P
2K
35K
2K
35K
3K
TE-VCA
TE-VCA
61.3K
50P
X2
3K
61.3K
50P
APC
FE-BAL
TE-BAL
ASY
EFM-OUT
C. DEF
DEFECT
RFOK
MIRR
3T-OUT
C. FE
FE-OUT
FE-
GND
TE-
TE-OUT1
TE-OUT2
DET-IN
DET-OUT
VREF-IN

DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

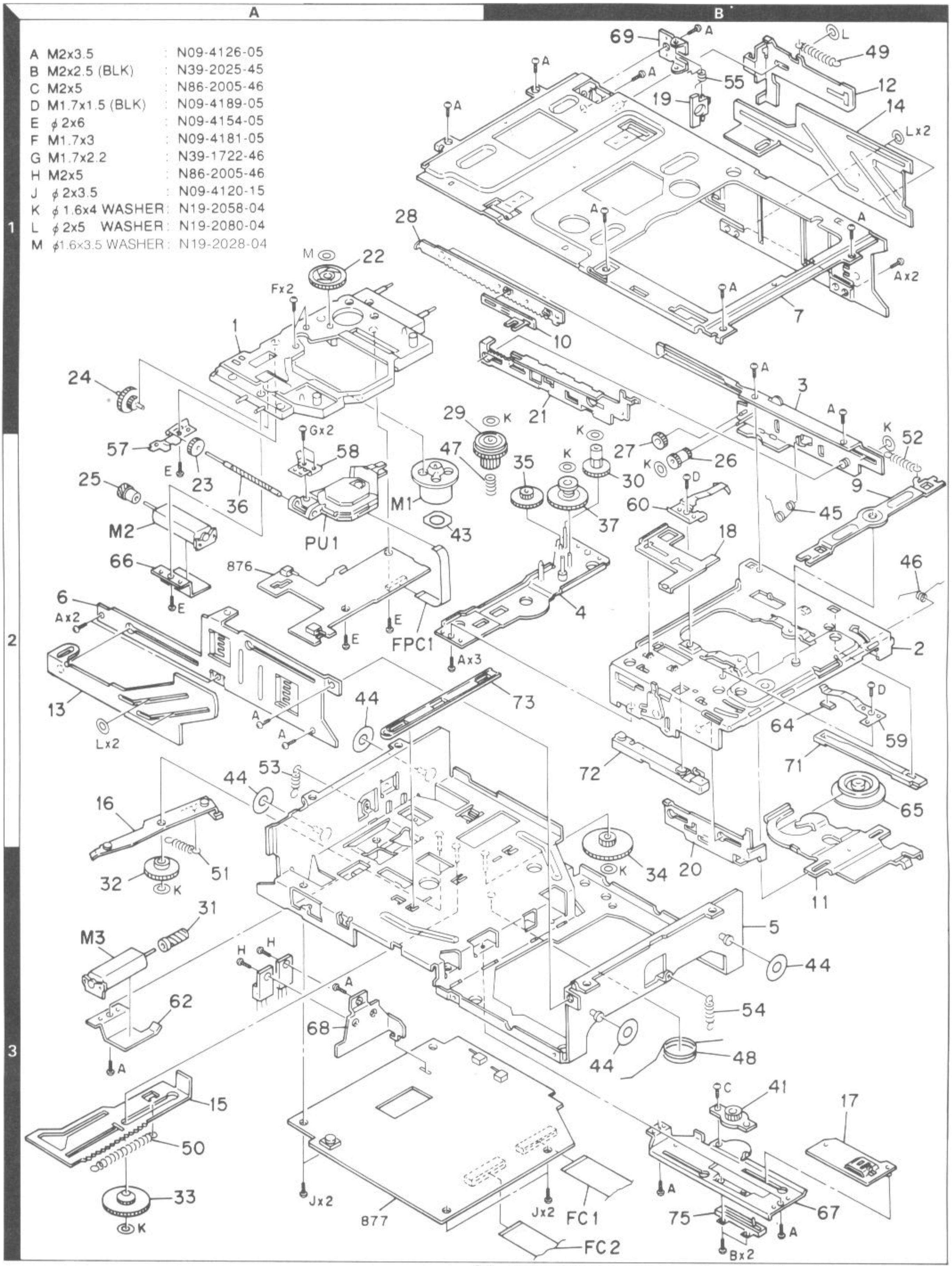
CAUTION : **For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠ indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.**

IC2: UPD63702


FD
TD
SD
MD
A. GND
SBCK
SBSO
SBSY
SFSY
D. VDD
C203
C202
C201
C102
C101
T7
T6
T5
T4
TM4
TM2
TEST1
TEST0
D. GND
FBAL
TBAL
A. VDD
TBC
EFM
HOLD
RFOK
MIRR
A. GND
VR2
VR1
FE
TE
TEC
REFOUT
A. VDD
FBAL D/A
TBAL D/A
FOCUS D/A OUTPUT
TRACKING D/A OUTPUT
SLED D/A OUTPUT
SPINDLE D/A OUTPUT
FOCUS CONTROL
TRACKING CONTROL
SLED CONTROL
SPINDLE CONTROL
SUB CODE PROCESSOR
ERROR CORRECT PROCESSOR
TEST PROCESSOR
SERVO BLOCK
AUTO GAIN CONTROL
CLV PROCESSOR
MEMORY PROCESSOR
16K SRAM
SWITCH
A/D CONVER-TER
AMP
COMPALATOR
FOCUS REGISTER
TRACKING REGISTER
VR REGISTER
SVDRAM
SVDRAM INTARFACE
ADDER
ADDER INTARFACE
MULTI-PLIER
SVCRAM
SVCRAM INTARFACE
SVROM
ROM DECODER
u-COM INTERFACE
DATA PROCESSOR BLOCK
EFM DEMODULATOR
TIMING GENERATOR
DIGITAL PLL
D/A BLOCK
D/A INTERFACE CIRCUIT
DE-EMPHASIS CIRCUIT
x8 OVER SAMPLING DIGITAL FILTER
NOISE SHAVER
NOISE SHAVER
OUTPUT BUFFER
OUTPUT BUFFER
DIGITAL AUDIO INTERFACE
OUTPUT PROCESSOR
OSC
RFCK
WFCK
LOCK
PLCK
D. VDD
VCO
VCO
D. GND
POUT
CTLV
TX
LRCK
SCKO
DOUT
DIN
EMPH
D. VDD
RST
A0
STB
SCK
SO
SI
D. GND
X. GND
XTAL
XTAL
X. VDD
DA. VDD
R+
R-
DA. GND
DA. GND
L-
L+
DA. VDD
D. VDD
FLAG
WDCK
C16M

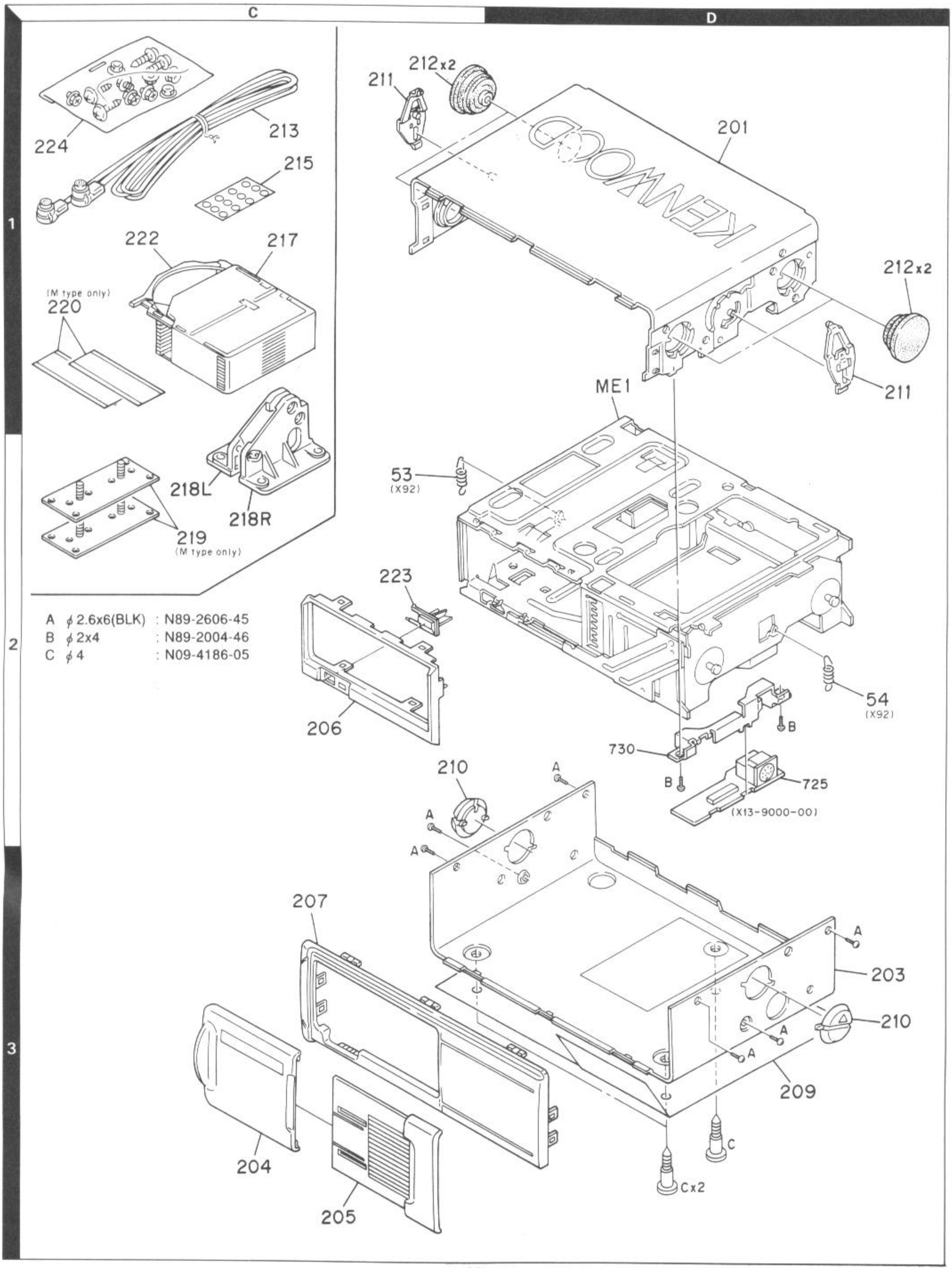
EXPLODED VIEW (UNIT)

A	M2x3.5	N09-4126-05
B	M2x2.5 (BLK)	N39-2025-45
C	M2x5	N86-2005-46
D	M1.7x1.5 (BLK)	N09-4189-05
E	ϕ 2x6	N09-4154-05
F	M1.7x3	N09-4181-05
G	M1.7x2.2	N39-1722-46
H	M2x5	N86-2005-46
J	ϕ 2x3.5	N09-4120-15
K	ϕ 1.6x4 WASHER	N19-2058-04
L	ϕ 2x5 WASHER	N19-2080-04
M	ϕ1.6x3.5 WASHER	N19-2028-04


A
B
1
2
3
69
A
49
L
55
12
19
14
Lx2
A
28
M
22
Fx2
A
Ax2
7
1
10
24
21
3
29
K
K
27
26
52
57
Gx2
58
47
35
K
30
K
D
E
23
25
36
M1
37
60
45
9
M2
PU1
43
18
46
66
876
E
4
6
Ax2
E
E
FPC1
Ax3
2
D
13
73
64
59
Lx2
44
A
A
53
44
72
71
16
65
51
34
20
32
K
11
31
M3
5
44
H
H
62
A
54
68
A
44
48
C
41
17
15
50
33
K
Jx2
877
Jx2
FC1
FC2
A
75
67
A
Bx2

Parts with the exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (MECHANISM)


C
D
1
2
3
224
213
215
222
217
(M type only)
220
218L
218R
219
(M type only)
211
212x2
201
212x2
211
ME1
53
(X92)
223
206
54
(X92)
B
730
B
725
(X13-9000-00)
210
A
A
A
207
A
203
210
A
A
209
C
Cx2
204
205

A	ϕ 2.6x6(BLK)	: N89-2606-45
B	ϕ 2x4	: N89-2004-46
C	ϕ 4	: N09-4186-05

Parts with the exploded numbers larger than 700 are not supplied.

PARTS LIST

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnes dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

KDC-C710

Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕 向
201	1D	*	A01-2624-11	METALLIC CABINET	
203	3D	*	A10-4284-21	CHASSIS	
204	3C	*	A21-2351-22	DRESSING PANEL	
205	3C	*	A21-2353-22	DRESSING PANEL	
206	2C	*	A22-1285-22	SUB PANEL	
207	3C	*	A64-1026-11	PANEL	
209	3D	*	B58-1253-24	CAUTION CARD	
-			B46-0100-50	WARRANTY CARD	
-			B46-0172-13	QUESTIONAIRE CARD	K
-			B46-0182-14	ID CARD	E
-			B58-1236-04	CAUTION CARD	
-		*	B64-0913-00	INST.MAN.(ENG.,FRE.,SPA.,POR.)	K E
-		*	B64-0914-00	INST.MANUAL (ENG.,CHI.,)	M
-		*	B64-0915-00	INST.MANUAL (GER.,DUT.,ITA.)	E
210	3D	*	D10-4031-13	ARM	
211	1C	*	D10-4033-04	LEVER	
212	1D	*	D39-0226-03	DAMPER	
213	1C		E30-4138-05	CORD WITH PLUG	
215	1C	*	F19-1303-04	BLIND PLATE	
-		*	H02-0812-13	INNER CARTON CASE	
-		*	H10-4553-12	POLYSTYRENE FOAMED FIXTURE	
-			H25-0337-04	PROTECTION BAG (180X300X0.03)	
-			H25-1115-04	PROTECTION BAG	
-		*	H54-0691-04	ITEM CARTON CASE	
217	1C	*	J19-4676-12	HOLDER ASSY (MAGAZINE)	
218L	1C	*	J19-4710-13	BRACKET (L)	
218R	1C	*	J19-4711-13	BRACKET (R)	
219	1C	*	J21-7775-04	MOUNTING HARDWARE ASSY	M
220	1C		J69-0506-04	ADHESIVE TAPE	M
222	1C	*	J99-0604-01	TRAY	
223	2C	*	K24-1770-04	KNOB	
224	1C		N99-1628-15	SCREW SET	M
224	1C	*	N99-1645-05	SCREW SET	K E
A	3D		N89-2606-45	BINDING HEAD TAPTITE SCREW	
B	2D		N89-2004-46	BINDING HEAD TAPTITE SCREW	
C	3D	*	N09-4186-05	STEPPED SCREW	
ME1	2D	*	X92-3110-00	MECHANISM ASSY	

SUB-CIRCUIT UNIT(X13-8990-00)

Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕 向
CN1			E40-9487-05	FLAT CABLE CONNECTOR	
CN2			E40-9536-05	FLAT CABLE CONNECTOR	
S1 ,2		*	S74-0811-05	MICRO SWITCH	

SUB-CIRCUIT UNIT(X13-9000-00)

Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕 向
CN1		*	E40-9555-05	FLAT CABLE CONNECTOR	
J1		*	E56-0825-05	CYLINDRICAL RECEPTACLE	

CD PLAYER UNIT(X32-4260-00)

Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Destination 仕 向
C1			C92-1336-05	ELECTRO 10UF 6.3WV	
C3			C92-1336-05	ELECTRO 10UF 6.3WV	
C4			CC73FCH1H101J	CHIP C 100PF J	
C5			CK73FB1H223KTA	CHIP C 0.022UF K	
C6			CC73FCH1H030C	CHIP C 3.0PF C	
C7			CC73FCH1H330J	CHIP C 33PF J	
C8			C92-0509-05	CHIP-TAN 10UF 6.3WV	
C9			CK73FB1C104K	CHIP C 0.10UF K	
C10			CK73FB1H102K	CHIP C 1000PF K	
C11			C92-0509-05	CHIP-TAN 10UF 6.3WV	
C12			CK73FB1C104K	CHIP C 0.10UF K	
C13			CK73FB1H473KTA	CHIP C 0.047UF K	
C14			CK73FB1H472K	CHIP C 4700PF K	
C15			CK73FB1H153KTA	CHIP C 0.015UF K	
C16			CC73FCH1H181J	CHIP C 180PF J	
C17			CK73FB1H103K	CHIP C 0.010UF K	
C18			CC73FCH1H271J	CHIP C 270PF J	
C19			CK73FB1H473KTA	CHIP C 0.047UF K	
C20			CK73FB1H103K	CHIP C 0.010UF K	
C21			CK73FB1C104K	CHIP C 0.10UF K	
C22			C92-1336-05	ELECTRO 10UF 6.3WV	
C26			C92-1336-05	ELECTRO 10UF 6.3WV	
C28		*	C92-1390-05	ELECTRO 100UF 6.3WV	
C30 -33			CK73FB1H471K	CHIP C 470PF K	
C34 -37			CC73FCH1H181J	CHIP C 180PF J	
C45			CK73FB1C104K	CHIP C 0.10UF K	
C46 ,47		*	C92-1393-05	ELECTRO 10UF 16WV	
C48 ,49			CK73FB1H222K	CHIP C 2200PF K	
C50 ,51		*	C92-1393-05	ELECTRO 10UF 16WV	
C52			C92-1335-05	ELECTRO 4.7UF 16WV	
C53 ,54			CK73FB1H682K	CHIP C 6800PF K	
C57			C92-0628-05	CHIP-TAN 10UF 10WV	
C60			C92-1335-05	ELECTRO 4.7UF 16WV	
C62			C92-1335-05	ELECTRO 4.7UF 16WV	
C63 ,64			CK73FB1C104K	CHIP C 0.10UF K	
C67			CC73FCH1H101J	CHIP C 100PF J	
C68			C92-1336-05	ELECTRO 10UF 6.3WV	
C71		*	C92-1391-05	ELECTRO 220UF 6.3WV	
C72			C92-1335-05	ELECTRO 4.7UF 16WV	
C73		*	C92-1392-05	ELECTRO 100UF 10WV	
C74			C92-1335-05	ELECTRO 4.7UF 16WV	
C75			CK73FB1C104K	CHIP C 0.10UF K	
C77		*	C92-1388-05	ELECTRO 470UF 16WV	
C78 ,79			CK73EB1H104K	CHIP C 0.10UF K	
C81 ,82			CK73FB1C104K	CHIP C 0.10UF K	
C83			C90-1827-05	ELECTRO 0.047F 5.5WV	
C400			CK73EB1H104K	CHIP C 0.10UF K	
C401,402			C92-0005-05	CHIP-TAN 2.2UF 6.3WV	
C403			CC73FCH1H221J	CHIP C 220PF J	
C404			CK73FB1C104K	CHIP C 0.10UF K	
C405			C92-1336-05	ELECTRO 10UF 6.3WV	
C500-501			CK73EB1E224K	CHIP C 0.22UF K	
C502			CK73EB1C105K	CHIP C 1.0UF K	
C503			CK73FB1H471K	CHIP C 470PF K	
C504			C92-1388-05	ELECTRO 470UF 16WV	
CN1			E40-9338-05	FLAT CABLE CONNECTOR	

⚠ indicates safety critical components.

PARTS LIST

* New Parts
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CD PLAYER UNIT (X32-4260-00)

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名／規格	Desti-nation 仕向
CN2			E40-9404-05	FLAT CABLE CONNECTOR	
X1			L78-0620-05	RESONATOR	
X2			L78-0529-05	RESONATOR	
H	3A		N86-2005-46	BINDING HEAD TAPTITE SCREW	
R1 ,2			RK73FB2A103J	CHIP R 10K J 1/10W	
R3			RK73FB2A393J	CHIP R 39K J 1/10W	
R4			RK73EB2B820J	CHIP R 82 J 1/8W	
R5			RK73FB2A393J	CHIP R 39K J 1/10W	
R6 ,7			RK73EB2B824J	CHIP R 820K J 1/8W	
R8 ,9			RK73FB2A562J	CHIP R 5.6K J 1/10W	
R10			RK73FB2A392J	CHIP R 3.9K J 1/10W	
R11			RK73EB2B223J	CHIP R 22K J 1/8W	
R12			RK73FB2A824J	CHIP R 820K J 1/10W	
R13			RK73FB2A473J	CHIP R 47K J 1/10W	
R14			RK73FB2A303J	CHIP R 30K J 1/10W	
R15			RK73FB2A113J	CHIP R 11K J 1/10W	
R16			RK73FB2A474J	CHIP R 470K J 1/10W	
R17			RK73EB2B102J	CHIP R 1.0K J 1/8W	
R18			RK73FB2A103J	CHIP R 10K J 1/10W	
R19			RK73FB2A103J	CHIP R 10K J 1/10W	
R21 ,22			RK73FB2A104J	CHIP R 100K J 1/10W	
R26 -29			RK73EB2B472J	CHIP R 4.7K J 1/8W	
R30 -33			RK73FB2A562J	CHIP R 5.6K J 1/10W	
R34 -37			RK73FB2A752J	CHIP R 7.5K J 1/10W	
R38 -41			RK73FB2A103J	CHIP R 10K J 1/10W	
R46 ,47			RK73FB2A681J	CHIP R 680 J 1/10W	
R58 ,59			RK73FB2A472J	CHIP R 4.7K J 1/10W	
R60 ,61			RK73FB2A223J	CHIP R 22K J 1/10W	
R62			RK73FB2A682J	CHIP R 6.8K J 1/10W	
R63			RK73FB2A122J	CHIP R 1.2K J 1/10W	
R65			RK73FB2A153J	CHIP R 15K J 1/10W	
R66			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R68			RK73FB2A682J	CHIP R 6.8K J 1/10W	
R70			RK73FB2A562J	CHIP R 5.6K J 1/10W	
R71			RK73FB2A101J	CHIP R 100 J 1/10W	
R73			RK73FB2A682J	CHIP R 6.8K J 1/10W	
R74 ,75			RK73FB2A103J	CHIP R 10K J 1/10W	
R76			RK73FB2A101J	CHIP R 100 J 1/10W	
R78			RK73FB2A101J	CHIP R 100 J 1/10W	
R79 -81			RK73FB2A223J	CHIP R 22K J 1/10W	
R82			RK73FB2A473J	CHIP R 47K J 1/10W	
R83			RK73FB2A103J	CHIP R 10K J 1/10W	
R84			RK73FB2A473J	CHIP R 47K J 1/10W	
R85			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R86			RK73EB2B102J	CHIP R 1.0K J 1/8W	
R87			RK73FB2A104J	CHIP R 100K J 1/10W	
R88			RK73FB2A101J	CHIP R 100 J 1/10W	
R90			RK73FB2A103J	CHIP R 10K J 1/10W	
R91 -93			RK73FB2A104J	CHIP R 100K J 1/10W	
R94			RK73EB2B104J	CHIP R 100K J 1/8W	
R95			RK73FB2A101J	CHIP R 100 J 1/10W	
R97 -99			RK73FB2A101J	CHIP R 100 J 1/10W	
R100			RK73FB2A103J	CHIP R 10K J 1/10W	
R101			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R120			RK73FB2A103J	CHIP R 10K J 1/10W	
R121			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R122			RK73EB2B102J	CHIP R 1.0K J 1/8W	
R123			RK73FB2A103J	CHIP R 10K J 1/10W	
R124			RK73FB2A473J	CHIP R 47K J 1/10W	
R125			RK73FB2A104J	CHIP R 100K J 1/10W	
R126			RK73FB2A183J	CHIP R 18K J 1/10W	
R127			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R135,136			RK73FB2A222J	CHIP R 2.2K J 1/10W	
R200			RK73EB2B100J	CHIP R 10 J 1/8W	
R201			RK73FB2A103J	CHIP R 10K J 1/10W	
R202-212			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R213-217			RK73FB2A104J	CHIP R 100K J 1/10W	
R218			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R219			RK73FB2A104J	CHIP R 100K J 1/10W	
R221			RK73FB2A104J	CHIP R 100K J 1/10W	
R222			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R223			RK73FB2A104J	CHIP R 100K J 1/10W	
R301			RK73FB2A104J	CHIP R 100K J 1/10W	
R302,303			RK73FB2A104J	CHIP R 100K J 1/10W	
R303			RK73FB2A104J	CHIP R 100K J 1/10W	
R305			RK73FB2A104J	CHIP R 100K J 1/10W	
R306			RK73FB2A104J	CHIP R 100K J 1/10W	
R401-404			RK73FB2A102J	CHIP R 1.0K J 1/10W	
R500-502			RK73FB2A223J	CHIP R 22K J 1/10W	
R503			RK73FB2A224J	CHIP R 220K J 1/10W	
R504			RK73FB2A472J	CHIP R 4.7K J 1/10W	
R505			RK73FB2A104J	CHIP R 100K J 1/10W	
W2 -4			R92-2052-05	CHIP R 0 J 1/10W	
W7 ,8			R92-2052-05	CHIP R 0 J 1/10W	
W205			R92-2053-05	CHIP R 0 J 1/8W	
W211			R92-2052-05	CHIP R 0 J 1/10W	
W400			R92-2052-05	CHIP R 0 J 1/10W	
S1			S68-0823-05	PUSH SWITCH	
S2		*	S70-0838-05	TACT SWITCH	
S3			S68-0823-05	PUSH SWITCH	
D1 ,2			DAP202K	DIODE	
D4 ,5			MA3056-M	ZENER DIODE	
D9			DA204K	DIODE	
D10			MA3056-M	ZENER DIODE	
D11		*	MA3075-M	ZENER DIODE	
D12			DA204K	DIODE	
D13 -15			1SR154-400	DIODE	
D16			DA204K	DIODE	
D17 -20			SC016-2	DIODE	
IC1		*	UPC2572A	MOS-IC	
IC2		*	UPD63702	MOS-IC	
IC3			NJM2100M	MOS-IC	
IC5			TA78L05F	IC(VOLTAGE REGULATOR/ +5V)	
IC6		*	UPD78058GC-450	MI-COM IC	
IC7			PST9137NR	ANALOGUE IC	
IC8		*	BA6791FP	ANALOGUE IC	

⚠ indicates safety critical components.

PARTS LIST

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CD PLAYER UNIT (X32-4260-00)

Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部 品 番 号	Description 部 品 名／規 格	Desti-nation 仕 向
IC9			BA6287F	ANALOGUE IC	
IC10			M5278D05	IC(VOLTAGE REGULATOR)	
IC11		*	AK93C45AF	MOS-IC	
IC11		*	BR93LC46AF	MOS-IC	
Q1			2SA1362(Y)	TRANSISTOR	
Q2			DTC124EK	DIGITAL TRANSISTOR	
Q3 ,4			2SD2114K	TRANSISTOR	
Q5			DTA124EK	DIGITAL TRANSISTOR	
Q6			2SB1188	TRANSISTOR	
Q7 ,8			DTC124EK	DIGITAL TRANSISTOR	
Q9			DTA114EK	DIGITAL TRANSISTOR	
Q10			2SA1362(Y)	TRANSISTOR	
Q11			DTA143EK	DIGITAL TRANSISTOR	
Q12			2SA1362(Y)	TRANSISTOR	
Q13 ,14			DTC124EK	DIGITAL TRANSISTOR	
Q15			2SB1655(E,F)	TRANSISTOR	
Q16			2SC2412K	TRANSISTOR	
Q17			DTA143EK	DIGITAL TRANSISTOR	
Q18 ,19			DTC124EK	DIGITAL TRANSISTOR	
Q20 ,21			DTC114YK	DIGITAL TRANSISTOR	
Q22			2SC2412K	TRANSISTOR	
TH1			NTH5G40B333K01	THERMISTOR	

CD-CH MECHANISM ASSY(X92-3110-00)

Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部 品 番 号	Description 部 品 名／規 格	Desti-nation 仕 向
1	1A	*	A10-4229-03	CHASSIS ASSY	
2	2B	*	A10-4231-02	CHASSIS CALKING ASSY	
3	1B	*	A10-4233-03	CHASSIS CALKING ASSY	
4	2B	*	A10-4235-14	CHASSIS CALKING ASSY	
5	3B	*	A10-4237-02	CHASSIS CALKING ASSY	
6	2A	*	A10-4239-02	CHASSIS	
7	1B	*	A10-4240-02	CHASSIS CALKING ASSY	
9	2B	*	D10-4018-03	ARM	
10	1B	*	D10-4019-03	LEVER	
11	2B	*	D10-4020-03	LEVER	
12	1B	*	D10-4022-04	ARM	
13	2A	*	D10-4023-04	SLIDER ASSY	
14	1B	*	D10-4025-03	SLIDER	
15	3A	*	D10-4026-03	LEVER	
16	2A	*	D10-4027-04	LEVER ASSY	
17	3B	*	D10-4029-04	SLIDER ASSY	
18	2B	*	D10-4032-03	SLIDER	
19	1B	*	D10-4081-03	LEVER	
20	2B	*	D12-0618-03	CAM	
21	1B	*	D12-0619-03	CAM	
22	1A	*	D13-1251-04	GEAR	
23	1A	*	D13-1252-04	GEAR	
24	1A	*	D13-1253-04	GEAR	
25	2A	*	D13-1254-04	GEAR	
26	2B	*	D13-1255-14	GEAR	
27	1B	*	D13-1256-04	GEAR	
28	1A	*	D13-1257-04	GEAR ASSY	
29	2A	*	D13-1259-04	GEAR	
30	2B	*	D13-1262-14	GEAR	
31	3A	*	D13-1263-04	WORM	
32	3A	*	D13-1264-04	GEAR	
33	3A	*	D13-1265-04	GEAR	
34	3B	*	D13-1266-04	GEAR	
35	2A	*	D13-1338-04	GEAR	
36	2A	*	D19-0614-04	LEAD SCREW	
37	2A	*	D19-0615-04	CLUTCH ASSY	
41	3B	*	D39-0225-05	DAMPER	
FC1	3B	*	E39-0172-05	FLAT CABLE	
FC2	3B	*	E39-0173-05	FLAT CABLE	
43	2A	*	F09-1220-04	SHEET	
44	3B	*	F09-1245-04	SHEET	
45	2B	*	G01-2778-04	TORSION COIL SPRING	
46	2B	*	G01-2779-04	TORSION COIL SPRING	
47	2A	*	G01-2781-04	COMPRESSION SPRING	
48	3B	*	G01-2782-04	TORSION COIL SPRING	
49	1B	*	G01-2783-04	EXTENSION SPRING	
50	3A	*	G01-2784-04	EXTENSION SPRING	
51	3A	*	G01-2785-04	EXTENSION SPRING	
52	1B	*	G01-2789-04	EXTENSION SPRING	
53	2A	*	G01-2808-04	EXTENSION SPRING	
54	3B	*	G01-2809-04	EXTENSION SPRING	
55	1B	*	G01-2814-04	TORSION COIL SPRING	
57	1A	*	G02-1235-04	FLAT SPRING	
58	1A	*	G02-1236-04	FLAT SPRING	
59	2B	*	G02-1237-03	FLAT SPRING	
60	2B	*	G02-1238-04	FLAT SPRING	
62	3A	*	G02-1240-04	FLAT SPRING	
64	2B	*	G10-1023-04	FELT	
65	2B	*	J11-0614-03	CLAMPER	
66	2A	*	J21-7695-04	MOUNTING HARDWARE	
67	3B	*	J21-7696-03	MOUNTING HARDWARE	
68	3A	*	J21-7698-04	MOUNTING HARDWARE	
69	1B	*	J21-7766-03	MOUNTING HARDWARE	
71	2B	*	J90-0758-03	GUIDE	
72	2B	*	J90-0759-03	GUIDE	
73	2B	*	J90-0760-03	RAIL	
FPC1	2A	*	J84-0063-05	FLEXIBLE PRINTED WIRING BOARD	
A	1B		N09-4126-05	MACHINE SCREW (2X3.5,Cﾀｲﾄ,ｸﾛ)	
B	3B		N39-2025-45	PAN HEAD MACHIN SCREW	
C	3B		N86-2005-46	BINDING HEAD TAPTITE SCREW	
D	2B	*	N09-4189-05	TAPTITE SCREW (1.7X1.5(Sﾀｲﾄ))	
E	2A		N09-4154-05	TAPTITE SCREW (2X6(Pﾀｲﾄ))	
F	1A	*	N09-4181-05	MACHINE SCREW (M1.7X3(ﾛｯｸﾀｲﾄ)	
G	1A		N39-1722-46	PAN HEAD MACHIN SCREW	
J	3A		N09-4120-15	TAPTITE SCREW (Sﾀｲﾄ2X3.5ｽｽﾞﾒ)	
K	2B		N19-2058-04	FLAT WASHER (1.6X4)	
L	1B	*	N19-2080-04	FLAT WASHER (2X5)	
M	1A	*	N19-2028-04	FLAT WASHER (1.6×3.5)	
75	3B	*	R33-0201-05	SLIDE TYPE VARIABLE RESISTOR	
M1	2A	*	T42-0760-04	DC MOTOR ASSY	
M2 ,3	3A		T42-0749-05	DC MOTOR	
PU1	1A		T25-0209-05	OPTICAL PICKUP HEAD	

⚠ indicates safety critical components.

SPECIFICATIONS

Specifications subject to change without notice.

CD section

Laser Diode	GaAlAs (l=780 nm)
Digital Filter (D/A)	8 Times Over Sampling
D/A Converter	1 Bit
Spindle Speed	500 ~ 200 rpm (CLV)
Wow & Flutter	Below Measurable Limit
Frequency Response	5 Hz ~ 20 kHz (±1 dB)
Total Harmonic Distortion	0.005 % (1 kHz)
S/N Ratio (dB)	94 dB
Dynamic Range	94 dB
Channel Separation	85 dB

General

Operating Voltage	14.4 V (11 ~ 16 V allowable)
Current Consumption	0.8 A at rated power
Installation Size (W × H × D)	250 × 80 × 173 mm (9-13/16 × 3-1/8 × 6-13/16 in.)
Weight	2.0 kg

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